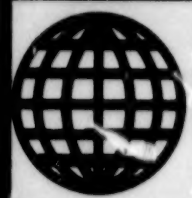


PRS-TND-94-005
5 February 1994



**FOREIGN
BROADCAST
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SERVICE**

JPRS Report

Proliferation Issues

PROLIFERATION ISSUES

JPRS-TND-94-005

CONTENTS

25 February 1994

[This report contains foreign media information on issues related to worldwide proliferation and transfer activities in nuclear, chemical, and biological weapons, including delivery systems and the transfer of weapons-relevant technologies.]

CHINA

| | |
|---|---|
| Commentator Hails Startup of Daya Bay Nuclear Power Station | 1 |
|---|---|

EAST ASIA

REGIONAL AFFAIRS

| | |
|---|---|
| ROK Press Reacts to DPRK Ministry Statement | 2 |
|---|---|

JAPAN

| | |
|--|---|
| Experts Claim Tokyo Has Essentials To Develop Bomb | 3 |
| Takemura Denies SUNDAY TIMES Report on Nuclear Arms | 3 |
| Tokyo To Scale Down Plutonium Production From Spent Fuel | 4 |

NORTH KOREA

| | |
|---|---|
| Foreign Ministry Statement on U.S. 'Reversing' Agreement | 4 |
| Foreign Ministry Issues Statement on Japan's Nuclear Arms | 5 |

SOUTH KOREA

| | |
|---|---|
| Papers React to U.S. Order To Prepare for Team Spirit | 5 |
| Senior Official Says No U.S.-ROK 'Discord' Over Nuclear Issue | 6 |

EAST EUROPE

BOSNIA-HERZEGOVINA

| | |
|---|---|
| Muslim Artillery Using 'Chlorine-Based Toxic Gases' | 7 |
|---|---|

CZECH REPUBLIC

| | |
|--|---|
| New Law Restricts Advertising, Promotion of Arms Sales | 7 |
|--|---|

LATIN AMERICA

BRAZIL

| | |
|--|---|
| Senate Gives Final Approval to Nuclear Safeguard Agreement | 8 |
| Naval Nuclear Program To Double Processing Capacity | 8 |
| Nuclear Industrial Complex Reorganizing | 8 |
| Editorial Underlines Importance of Nuclear, Patents Bills | 9 |

NEAR EAST/SOUTH ASIA

ALGERIA

| | |
|--|----|
| Reactions to Dedication of Nuclear Reactor | 10 |
|--|----|

INDIA

| | |
|---|----|
| ISRO Chief Views Cryogenic Engine Plans, U.S. Embargo | 11 |
| 'Milestone' in Fast Breeder Reactor Output | 12 |
| Long-Range Surface-to-Air Missile Successfully Tested | 12 |
| Further on Successful Test of 'Nag' Missile | 12 |
| Scientist Says Prithvi Flight 'Tremendous Success' | 13 |
| Development of Antiballistic Missile System Studied | 13 |
| Rao Chairs Meet on Chemical Weapons Convention | 14 |
| Panel for Authority on Chemical Weapons Formed | 14 |
| Official Admits Ability To Produce Enriched Uranium | 15 |
| Nuclear Plant Facilities Adequate for Emergencies | 15 |

IRAQ

| | |
|---|----|
| UN's Ekeus 'Not Fully Satisfied' on Chemical Weapons | 15 |
| Disagreements With UN Over Weapons Monitoring Still Exist | 16 |
| Russian UN Arms Inspector Says Mission Successful | 16 |
| Paper Says Chemical Shipment Story Part of 'Conspiracy' | 17 |

PAKISTAN

| | |
|--|----|
| Editorial Views Future of Pressler Amendment | 17 |
| Paper Views U.S. Aid Condition, Favors Nuclear Program | 18 |
| Maintenance of Nuclear Deterrent Urged | 18 |
| Article Views Country's Nuclear Option | 19 |
| Country To Manufacture Nuclear Power Reactors 'Soon' | 21 |
| PAEC Sets Up Nuclear Power Institute | 22 |

CENTRAL EURASIA

RUSSIA

| | |
|---|----|
| Missile Deactivation Progress Reported | 23 |
| Facilities for Destroying Chemical Weapons Lacking | 24 |
| Uranium Thefts, Destination Examined | 25 |
| Lack of Money Said Behind Thefts, Resale of Uranium | 27 |
| Obninsk Businessman Found To Have Uranium-235 | 27 |
| Krasnoyarsk-26 Plutonium Now Used for Fuel, Not Weapons | 28 |
| Camera Crew Visits SS-17 Missile Site | 28 |
| Scientist Claims Parts of Russia Affected by 'Agent Orange' | 28 |
| Uranium Mining Declassification Applauded | 29 |

UKRAINE

| | |
|--|----|
| Kravchuk Secures Victory at Disarmament Debate | 31 |
| President Answers Questions on START Treaty | 31 |
| Supreme Council Resolution on Nuclear Weapons | 32 |
| Shmarov Comments on Denuclearization, Funding | 33 |
| Zlenko Speech at Parliament Session | 34 |
| Deputy Disputes Official Text of START Resolution | 35 |
| Military Reportedly Breaks Tripartite Nuclear Accord | 36 |
| Missile Detargeting, Continuing Danger Eyed | 36 |
| Kiev Military Retarding Missile Arrangements | 37 |
| Minister Urges Use of Own Nuclear Fuel | 38 |

| | |
|---|----|
| Situation in Nuclear Power Engineering 'Catastrophic' | 39 |
| WEST EUROPE | |
| AUSTRIA | |
| Center To Train UN Chemical Weapons Inspectors | 41 |
| FRANCE | |
| Beneficiaries of 9-Billion-Franc Saudi Arms Deal Outlined | 41 |
| TURKEY | |
| Ataman on Joining Nuclear Nonproliferation Agreement | 41 |
| INTERNATIONAL | |
| Agreement To Deploy U.S. Patriot Missiles in ROK Viewed | 42 |
| Deployment Agreement Reported | 42 |
| Press Overview of Deployment | 42 |
| KCNA Denounces Deployment | 45 |
| ROK Defense Ministry's View | 46 |
| More Press Reaction | 46 |
| KCNA Reiterates Denouncement | 48 |
| Seoul 'In No Hurry' to Deploy Patriots | 48 |
| Controversy Over Alleged Russian Nuclear Assistance to DPRK | 48 |
| 'Active' Russian Participation Claimed | 48 |
| Kolesnikov Says Reporting Based on 'Forgery' | 49 |
| KCNA Cites Russian Denial | 50 |
| DPRK Envoy Denies Russian Involvement | 50 |
| DPRK Informs IAEA of 'Total Rejection' of Inspections | 51 |
| Russia Allegedly Stops Delivery of Submarines to DPRK | 51 |
| Japan Drafts Accord on Helping CIS Republics Scrap Nuclear Arms | 51 |
| Belarus Seeks U.S.-Brokered Uranium Sales Deal With Russia | 51 |
| Ukraine To Take No Part in Uranium Reprocessing Project | 52 |
| Iran Allegedly Suspected Czech Company Employee of Espionage | 52 |
| Czech Premier Denies Reports of Nuclear Sales to Iran | 52 |
| Kravchuk, Kohl Discuss Aid for Nuclear Arms Destruction | 53 |
| U.S. To Supply Russia 'Nearly \$30 Million' for CW Destruction | 53 |
| Kozyrev's Remarks on Rocket Deal With India | 53 |
| Russia-India Cryogenic Rocket Deal Reported 'Renegotiated' | 54 |
| Israeli Minister Rejects Russian Nuclear Technology Deal | 54 |
| Israeli Arms Shipment Arrives in Tallinn Port | 54 |
| 23 January | 54 |
| U.S. Firm To Construct Ukrainian Nuclear Waste Storage Facilities | 54 |
| Germany Threatens To Break Nuclear Accord With Brazil | 55 |
| Moscow Radio Commentary on Iran's Nuclear Programs | 56 |
| France's Nuclear Experience Seen Vital for Ukraine | 57 |
| Expansion of Russia-ROK Military Ties Anticipated | 57 |
| ROK Reportedly May Accept Russian Uranium as Loan Repayment | 57 |
| Russian Ministry Denies Offering To Pay ROK Debt in Arms | 58 |
| ROK, Russia To Discuss Joint Weapons Development in February | 58 |
| Pakistani Paper Criticizes Indo-Japanese Nuclear Proposal | 58 |
| Japan Urges India To Join NPT, Accept Inspections | 59 |

Commentator Hails Startup of Daya Bay Nuclear Power Station

*HK0802121094 Beijing RENMIN RIBAO in Chinese
7 Feb 94 p 1*

[Commentator's article: "A Rich Fruit of Reform and Opening Up—Congratulating the Start of Commercial Operations by the No. 1 Generating Unit of the Daya Bay Nuclear Power Station"]

[Text] The Spring Festival is just around the corner, and inspiring good news has come from the Daya Bay nuclear station in the south of the motherland: The No. 1 generating unit has officially been put into commercial operation, the commissioning of the No. 2 generating unit is progressing smoothly, and the entire project will be completed and put into operation this year. This is an important achievement in the peaceful use of nuclear energy and nuclear technology in our country, and is a rich fruit of our reform and opening up. It will have an important and far-reaching impact, not only on promoting the economic prosperity of Guangdong and Hong Kong, but also on the further development of nuclear undertakings in our country.

The Daya Bay nuclear power station is the product of reform and opening up. With the direct concern of Comrade Deng Xiaoping and the CPC Central Committee, with Comrade Jiang Zemin as its core, the construction of the Daya Bay nuclear power station has adhered to the policy of reform and opening up, has opened up a new path for making use of foreign funds to build large basic industrial projects, and also has made useful attempts at the establishment of a modern enterprise system. At each crucial moment, leading comrades of the CPC Central Committee and the State Council have given it concern and support, and have solved a series of important problems so that the entire project could progress smoothly. Local governments and departments concerned have done a great deal of work and have supported all aspects of the construction of the nuclear power plant. The successful construction of the Daya Bay nuclear power station is the result of giving play to the enthusiasm of the central authorities and of the local governments, as well as the result of the concerted efforts of all quarters concerned across the country.

In the entire course of the construction of the Daya Bay nuclear power station, the principles of "quality first and safety first" have been adhered to. Over one thousand nuclear power specialists and engineering technical personnel from more than 20 countries and regions have cooperated closely. The plant has absorbed the experience

of, and has drawn lessons from nuclear power construction projects abroad. It has followed international safety standards and codes, and has established strict quality supervision and guarantee systems. It also has undergone safety assessments and examinations by state and international atomic energy organizations and specialists. Therefore, the project quality and operational safety of the nuclear power station is ensured.

Nuclear power is a safe, clean, and economical energy source. China's energy resources are abundant, but they are not evenly distributed. In particular, the comparative shortage of energy resources in the economically developed southeast coastal areas has constituted a "bottleneck" that is constraining economic development. Therefore, while making great efforts to develop thermal and hydropower, the appropriate development of nuclear power in accordance with local conditions is an important way to solve the energy-shortage problem in these areas. At present, China has made a good start in developing nuclear power. The 300,000 kW Qinshan nuclear power station has been operating safely and steadily for more than one year and has reached the design load factor index two years ahead of schedule. After the nos. 1 and 2 generating units of the Daya Bay nuclear power station are all completed and put into operation, together with the pumped-storage hydroelectric power stations, about 12.6 billion kWh—equal to the consumption of about 6 million tonnes of coal—can be generated each year. This will ease much of the pressure on long-distance transportation and reduce environmental pollution, and the economic results and benefits to the society will be rather considerable.

Comrade Deng Xiaoping once explicitly pointed out: "We still have to develop nuclear power stations." Through the practice of constructing the Daya Bay and Qinshan nuclear power stations, we have accumulated experience, trained personnel, and created favorable conditions for the development of nuclear power. The broad masses of cadres and workers on the nuclear power front should seriously sum up experience, make persistent efforts, further implement the spirit of the 14th CPC National Congress and the Third Plenary Session of the 14th CPC Central Committee, seize the opportunity, deepen reform, open up wider to the outside world, and make greater contributions to further the development of nuclear undertakings in China [zhua zhu ji yu, shen hua gai ge, kuo da kai fang, wei jin yi bu fa zhan wo guo de he dian shi ye zuo chu geng da gong xian 2119 0145 2623 6657, 3234 0553 2395 7245, 2368 1129 7030 2397, 3634 6651 0001 2975 4099 1455 2053 0948 4104 2702 7193 0057 2814 0254 0427 2577 1129 6300 3759].

REGIONAL AFFAIRS

ROK Press Reacts to DPRK Ministry Statement
SK0202060494

[Editorial Report] The following is a compilation of reports published in Seoul vernacular daily newspapers on 2 February analyzing the statement by a DPRK Foreign Ministry spokesman denouncing the United States for 'reversing' the DPRK-U.S. agreement for a peaceful solution to the nuclear issue of the Korean peninsula.

The conservative CHOSON ILBO publishes on page 3 a 1,200-word article by reporter An Hui-chang, entitled "Background of the Statement on Reviewing the Withdrawal from the Nuclear Nonproliferation Treaty, NPT." Noting that U.S.-North Korean nuclear negotiations have entered "a new phase" with North Korea's publication of a Foreign Ministry statement warning of its withdrawal from the NPT, the article analyzes the North Korean position as aimed at "strategic purposes." First, North Korea wants to promptly secure "substantive fruit" by realizing working-level contact with the United States, instead of talks with the International Atomic Energy Agency, IAEA, through "a strong message" to the United States. Describing the substantive fruit as "attaining limited inspection" in negotiations with IAEA and suspension of the Team Spirit exercise, the article reports that North Korea must have judged that it had better use "strong measures" toward the United States in a bid to accomplish its goals rather than hoping for results from negotiations with the IAEA; and that by using such measures, the United States would eventually "make concessions," although initially showing "tough reactions."

The article cites observations of a National Unification Board, NUB, official that although North Korea is "outwardly" sternly denouncing the United States, it is maintaining the position not to destroy "the frame of negotiation" as long as the United States wants to continue dialogue. Basically, by releasing the recent statement, North Korea is seeking to "resume" negotiations with the United States to discuss the IAEA inspections, the Team Spirit issue, and the third round of North Korean-U.S. talks; and in this way, wants to "secure" its own practical interest. The paper also notes that North Korea intends to "consolidate" its internal unity by further creating "the atmosphere of tension" with the United States.

The liberal TONG-A ILBO publishes on page 5 a 1,300-word article by reporter Kim Cha-su entitled "'Attempt to Drag on Time' Aimed at Reducing Inspections." Noting the discussion between North Korea and IAEA over "the scale of inspection" is in the final stage, the article observes that by publishing the statement, North Korea is using "delaying strategy" aimed at dragging on time in discussions with IAEA because it is not in the position of accepting IAEA inspections during Kim Chong-il's birthday on 16 February. North Korea also thinks that if inspections are conducted before the IAEA Board of Governors meeting slated for 21 February, "heated discussions" will take place concerning North Korea's "nuclear development suspicion" by introducing the results of inspections.

The article observes that North Korea is attempting to maintain "a favorable position" regarding inspections in negotiations with the IAEA by expressing its "tough position" so "the scale of inspections" will be reduced "as much as possible." The article also points out the possibility that North Korea and the United States interpreted the promise of acceptance of IAEA inspections "differently." In other words, during a 29 December contact in New York, North Korea promised that it will accept IAEA inspections in such a way as to "ensure continuity of nuclear safeguard measures." The United States, however, might have interpreted this as acceptance of inspections "to the extent demanded by IAEA." This misinterpretation might have touched off North Korea's "tough position."

Concerning such various observations, relevant government officials predict that North Korea's "true intention" will be revealed during this week in its reply letter to the IAEA on the scope of inspections put forward by the IAEA, which North Korea is committed to send "within this week." The article concludes that the government views that although it is delaying time in negotiations with IAEA, North Korea will accept inspections by making "gradual concessions," and thus will not lead the situation to a "catastrophe."

The moderate HANGUK ILBO publishes on page 3 a 1,500-word article by reporter Chong Pyong-chin entitled "The Government's View on North Korean Statement on Withdrawal from NPT." Regarding the recent North Korean statement as "a message" to the United States, the article observes that North Korea is attempting to "upgrade" its position during forthcoming U.S.-North Korean high-level talks by stressing "the U.S. violation of promise" as the main reason for deadlocked North Korean-IAEA negotiations. Explaining differences in assertions between North Korea and IAEA on the scope of inspections, the article reports North Korea seems to wish to solve its problems at talks with the United States, instead of talks with IAEA. The article observes that there is "no change" in the North Korean policy to "settle" the negotiation over the nuclear inspections "in any form" before the IAEA's regular Board of Governors meeting slated for 21 February. The article refers to some observations on the ROK and U.S. side that North Korea will likely allow the IAEA inspection team to visit North Korea around 16 February—Kim Chong-il's birthday.

The pro-government SEOUL SINMUN publishes on page 5 a 1,200-word article by Yang Sung-hyon analyzing the background of the statement by a North Korean Foreign Ministry spokesman.

Describing it as "a message to the United States," the article analyzes that the statement has a long-term objective to secure an advantageous position in future talks with the United States by blaming the United States for breaking a promise, thus causing a stalemate in the negotiations with the IAEA.

The article notes that "North Korea could not easily accept the IAEA's requirements presented in the fourth contact on

17 January because North Korea had intended to use them as the conditions for a package deal in the third round talks with the United States."

The article speculates that the hard-line moves by the United States and the ROK, including discounting the meaning of the suspension of the Team Spirit exercise and the discussion on the deployment of Patriot missiles, may have stimulated North Korea's intention to seek a resolution through U.S.-North Korean contacts again.

The article ends by quoting a government official as saying: "It will be difficult for North Korea to secure another contact with the United States" due to the firm U.S. stance to side with the IAEA.

The independent left-leaning HANGYORE SINMUN publishes on page 3 a 1,500-word article by Pak Chong-mun entitled "North Korea's Nuclear Statement in the Final Stage, Is It a Tactic or Does the North Mean It?"

Noting that the statement implies a probability that North Korea may depart from a peaceful resolution of the nuclear issue, the article reports the Foreign Ministry is gravely concerned about the aggravation of the situation, although it tries to appear calm.

The article analyzes that the Foreign Ministry is not optimistic because: "First, if the statement is interpreted as North Korea's actual refusal of overall inspection [chon-myon sachal], the situation is in a deadlock because the United States and the IAEA cannot make any more concessions. Second, if the statement is interpreted as aiming at another contact with the United States for further reduced scope of inspections, there is still little possibility of settlement because the United States has no reason to intervene between North Korea and the IAEA."

The article quotes a Foreign Ministry official as saying: "It seems that North Korea began negotiations with the IAEA based on the optimistic report by the negotiating team with the United States, which had apparently only reported the advantageous part of the agreement, but now the IAEA's requirements are facing strong opposition inside the North."

The article ends by reiterating the threat implied by the statement to reverse the resolution plan of the nuclear issue.

JAPAN

Experts Claim Tokyo Has Essentials To Develop Bomb

LD0102104794 Moscow ITAR-TASS in English
1002 GMT 1 Feb 94

[By ITAR-TASS correspondent Vyacheslav Bantin]

[Text] Tokyo February 1 TASS—Tokyo now has practically all main technologies and components to develop its own nuclear weapons, since they were developed separately during civilian research, two leading Japanese independent experts, Hisashi Maeda and Haruo Fujii, [names as received] told ITAR-TASS on Tuesday in separate interviews.

They virtually confirmed the legitimacy of the conclusions drawn by the British Defence Ministry which, according to

press reports, had warned its government way back last December that Tokyo was close to developing a nuclear bomb.

Mr. Fujii believes, in particular, that Japan's strategy is to distribute the formation of a nuclear potential among civilian sectors which raise no suspicions. Under present conditions Tokyo has no possibility to "hide" any large research expenditure in the state budget without specifying the purpose of the research efforts, Mr. Maeda pointed out, for his part.

Such a strategy yields certain results because, for example, the country's companies have long devised unique explosive devices for carrying out complex oil-prospecting operations, the devices which may serve already now as finished detonators for a nuclear bomb.

Of course, substantial technical obstacles still remain in the path of the development of a combat nuclear capability. However, the main problem, in experts' opinion, still is in making a political decision on the establishment of such systems in practice.

Japan is now obviously not prepared for such a dramatic step, considering the pacifist sentiments among the public, the memories of the nuclear bombing of Hiroshima and Nagasaki, the constitutional bans, and the government-adopted three non-nuclear principles: Not to have, not to produce and not to import nuclear weapons.

However, Mr. Maeda believes that Tokyo may seriously change its stance if it encounters a chain reaction of the proclamation of "nuclear sovereignties" by neighbouring countries. Japan is extremely worried by sufficiently reliable reports about North Korea's feverish nuclear efforts. There are suspicions that Seoul may also embark upon the same road if it fails to contain the military threat from Pyongyang by other means.

Mr. Maeda is of the opinion that Japan can well become a third "new nuclear power of the region" after South Korea, although, in his view, Tokyo would hardly make such a decision easily.

Takemura Denies SUNDAY TIMES Report on Nuclear Arms

OW0102092994 Tokyo KYODO in English 0854 GMT
1 Feb 94

[Text] Tokyo, Feb. 1 KYODO—The Japanese Government Tuesday [1 February] brushed aside a reported move toward the possession of nuclear weapons and renewed a commitment to its long-held nonnuclear policy.

"Our country has been maintaining three nonnuclear principles and our use of nuclear energy is limited to peaceful purposes," Chief Cabinet Secretary Masayoshi Takemura told a news conference.

"It is impossible for us to develop nuclear weapons," the top government spokesman said.

Japan has long adhered to a policy of not possessing or producing nuclear weapons or allowing them into Japan.

Takemura's comment was intended to refute reports by a British newspaper that Tokyo might alter its nonnuclear policy and opt to possess nuclear weapons.

The SUNDAY TIMES reported Sunday that Britain's Defense Ministry has warned Prime Minister John Major that North Korea's suspected nuclear weapons development program may compel Japan to give up its nonnuclear policy.

Takemura said the British Government has acknowledged it has no reason to doubt Japan's nonnuclear stand.

He also denied a report carried Monday by another British paper, the independent, that Tokyo plans to develop intercontinental ballistic missiles in connection with its imminent launching of the first all-Japanese satellite-launch rocket.

"I want to emphasize our nation's space development activities are strictly limited to peaceful purposes," Takemura noted.

Tokyo To Scale Down Plutonium Production From Spent Fuel

OW0602085694 Tokyo KYODO in English 0842 GMT 6 Feb 94

[Text] Tokyo, Feb. 6 KYODO—Japan will scale down its extraction of plutonium from spent nuclear fuel, power industry sources said Sunday [6 February].

The new measures are contained in a long-term plan for the development and use of nuclear energy being prepared by the Atomic Energy Commission, the sources said.

Under the plan, the industry will also embark on long-term storage of large amounts of spent fuel on site at nuclear power stations, the sources said.

They said the commission has decided to introduce sweeping changes in the fuel recycling system, a main pillar of Japan's energy policy, because of international disapproval over increased use of plutonium.

The sources said the commissioning of a second recycling plant planned in addition to one being built by the Japan Nuclear Fuel Ltd. at the village of Rokkasho in Aomori Prefecture will now be delayed by about 20 years from around 2010 until 2030.

The timing of a third recycling plant would be decided around 2010, they said.

Delaying the commissioning of the second plant until 2030 will not affect demand for a plentiful supply of plutonium for a fast breeder reactor expected to be operational by that time, the sources said.

The plant now under construction at Rokkasho is designed to handle 800 tons of uranium annually, but spent fuel from the nation's power plants annually exceeds this amount and is expected to reach around 1,600 tons by 2010.

With the postponement of the second plant, Japan's reprocessing capacity will be significantly less than the supply of spent fuel.

The sources said this will necessitate long-term storage of spent fuel that cannot be processed at the Rokkasho site.

Due to the consequent shortage of storage space at nuclear facilities, the revised plan suggests that space be sought outside the facilities and that existing space be expanded, the sources said.

Japan's plutonium policy has been a subject in the United States Congress.

President Bill Clinton has expressed understanding of the policy, but has also written to congressional opponents of plutonium use to say he shares their opinion.

NORTH KOREA

Foreign Ministry Statement on U.S. 'Reversing' Agreement

SK3101231994 Pyongyang KCNA in English 2247 GMT 31 Jan 94

[Text] Pyongyang, January 31 (KCNA)—A spokesman for the Foreign Ministry of the DPRK made public a statement today in connection with the fact that the United States is reversing the agreement between the DPRK and the United States for a peaceful solution to the nuclear issue of the Korean peninsula.

The United States has gone the length of imposing a deadline and issued an ultimatum that it will not agree to hold a third round of the DPRK-USA talks, unless the DPRK accepts the IAEA demand, the statement said, and went on:

The United States plans to defiantly go ahead with its large-scale nuclear war exercises against the DPRK, including the "Team Spirit" joint military exercises and is pressing ahead on a full scale with the deployment of the "Patriot" missiles in South Korea.

All the facts clearly show that the United States has no intention at all to resolve the nuclear issue on the Korean peninsula peacefully but still remains unchanged as ever in its ulterior objectives to strangle the DPRK by force at any cost.

With regard to the current crisis due to the despicable and dangerous actions of perfidy on the part of the United States, the Ministry of Foreign Affairs of the Democratic People's Republic of Korea solemnly declares its position as follows:

First, if the United States defiantly goes ahead and reverses the promise it has made to the DPRK, the DPRK will no longer be bound by the promise it has made to the United States.

The DPRK's promise to the United States includes all the goodwill measures and commitments it has taken so far unilaterally for the continued DPRK-USA talks and for a peaceful resolution of the nuclear issue, such as the suspension of the effectuation of its announced withdrawal from the treaty on the non-proliferation of nuclear weapons, the freeze of all the nuclear activities, and the declared intention to renounce the graphite-moderated reactor system.

Second, if the United States has no intention to hold any further round of talks, the DPRK, too, will have no intention to do so.

It will be a gross miscalculation, if the United States considers the DPRK-USA talks as an offering to the DPRK.

The DPRK has consistently called for negotiations with the United States since the first days of the origination of the nuclear issue, in order to peacefully resolve the issue, not to seek any benefit from the United States.

We have so far lived on our own without any relations with the United States, we can live well on our own in the future, too, and we have become constitutionally adapted to such life.

Third, if the United States decides to take other options, we will also take our own counter measures.

In no way does the right of choice belong to big countries only.

The U.S. hardliners and conservatives must be held totally responsible for the catastrophic consequences arising therefrom, and the South Korean authorities, indiscreetly following their lead, can never extricate themselves from this responsibility.

Foreign Ministry Issues Statement on Japan's Nuclear Arms

SK0402112694 *Pyongyang KCNA in English*
1111 GMT 4 Feb 94

["DPRK Foreign Ministry Spokesman Warns Against Japan's Nuclear Armament That Has Reached a Dangerous Phase"—KCNA headline]

[Text] Pyongyang, February 4 (KCNA)—A spokesman for the DPRK Foreign Ministry issued a statement today regarding Japan's design to produce nuclear weapons by securing plutonium by itself.

The statement says:

According to reports, Japan will soon ignite monju, its first fast breeder reactor. This is an undisguised attempt of Japan to secure quantities of plutonium by itself and produce nuclear weapons any moment.

The annual capacity of the reprocessing plant of Japan is 800 tons, the biggest in the world. When it goes into full operation by the end of the present century, Japan will rank third in the world in reprocessing capacity after the United States and France.

Even according to data released by the Japan science and technology agency, it has already stockpiled 1.6 tons of plutonium at home and 2.9 tons abroad and will possess 50 tons of plutonium at all times by 2010, an amount enough to make more than 6,200 nuclear bombs.

Japan has already developed not only electronic detonating device and other elements for the manufacture of nuclear bombs and their technologies but also long-range means of nuclear delivery that can be used as intercontinental ballistic missiles.

Facts tell that Japan's nuclear armament now has reached a dangerous phase.

In view of the tense situation in which Japan's nuclear armament is being stepped up around the Korean peninsula in real earnest, we cannot but follow such developments with vigilance.

Japan's stepped-up nuclear armament means creating an obstacle to the process of denuclearization on the Korean peninsula.

Denuclearization of Northeast Asia must be realized if peace and security free from nuclear weapons are to be guaranteed substantially in this region including the Korean peninsula. To this end, not only Asia but the rest of the world should pay due attention to Japan which is capable of possessing nuclear weapons and moving in that direction.

Denuclearization of Northeast Asia should lead to a total elimination of nuclear weapons worldwide.

SOUTH KOREA

Papers React to U.S. Order To Prepare for Team Spirit

SK0802114394

[Editorial Report] The following is a compilation of articles and editorials from ROK vernacular newspapers published on 8 February on the U.S. order to prepare for the Team Spirit military exercise and the DPRK nuclear issue.

The moderate HANGUK ILBO in Korean publishes on page 2 a 900-word article by Washington-based correspondent Chong Chin-sok analyzing the background of the order to prepare for the Team Spirit exercise.

The article interprets the order to prepare for the Team Spirit exercise as a realization that "the negotiations on the North Korean nuclear issue have actually ruptured" and explains that the order serves as an ultimatum to North Korea.

The article reports "the United States is most concerned about the possibility that North Korea may declare itself a nuclear possessing country because this would automatically exempt North Korea from the obligation to accept nuclear inspections, and as a result, sanctions by the UN Security Council would not be as easy."

The article quotes Dr. (Spector) of the Carnegie Endowment for International Peace: "There is no clue that could prove North Korea is a nonnuclear country."

The article forecasts that the U.S. Government will look to "a final settlement at the edge of the cliff" by not announcing the detailed schedule of the Team Spirit exercise for the time being.

The moderate CHUNGANG ILBO in Korean publishes on page 3 an 800-word editorial criticizing the use of the Team Spirit exercise as a negotiating card.

The editorial asserts that the "purely defensive" Team Spirit exercise is "inevitable" and "natural" under the current defense system of the ROK-U.S. Combined Forces and that it was not appropriate to use the exercise in the negotiations in the first place.

The editorial asserts that if the exercise had not been used as a negotiating card so easily, we might not have been blamed for evoking the tension first by resuming the preparations for the joint military exercise after saying it was possible to suspend the exercise.

The editorial asserts there is no guarantee that North Korea would give up nuclear development even if all its conditions are met because in the past North Korea has always added new conditions after concessions have been made.

The editorial continues that in dealing with such a sensitive issue, it should be made clear what concessions we are able to make, and the advantages and disadvantages of giving up or insisting on nuclear development.

The editorial reports that while continuing dialogue efforts, we should make full preparations for the people's safety and the right of existence and urge the government to show, thorough its security posture, its clear position toward the North Korean nuclear issue.

The moderate CHUNGANG ILBO in Korean publishes on page 3 a 1,000-word article by Washington-based correspondent Chin Chang-uk.

The article notes that even though the hard-line moves of the United States—including U.S. Defense Secretary Perry's remarks regarding the use of sticks after carrots, the resumption of the Team Spirit exercise, deployment of Patriot missiles and Apache helicopters, and disclosure of the five-step operation plan—may lead to a crisis scenario, analysts of Korean affairs in Washington are optimistic.

The article reports that the analysts assert that North Korea will eventually accept all the inspection conditions of the International Atomic Energy Agency and that North Korea is dreaming if it thinks a war is inevitable under its current military preparedness. The article reports that the analysts think North Korea is not at all prepared for a large-scale war based on the fact that "there is a serious food shortage in North Korea, there has been no signs that it has made any efforts to secure more military provisions, and that North Korea has only a two-month energy reserve with its existing energy storage facilities."

The article cites another assertion that because North Korea is more afraid of the counterattack by ROK-U.S. Combined Forces, war will not breakout on the Korean peninsula as long as North Korea does not lose its reason.

The article concludes with concern by pessimistic analysts about the possibility that the United States might lose its reason after the humiliating results of the negotiations with North Korea.

Senior Official Says No U.S.-ROK 'Discord' Over Nuclear Issue

SK0402062594 Seoul YONHAP in English 0617 GMT
4 Feb 94

[Text] Seoul, Feb. 4 (YONHAP)—A senior government official, concerned over doubts about Korea-U.S. ties

aroused by Washington's reported pressure on Seoul to buy Patriot missiles, said on Friday there is no change in their basic relations.

Speaking on condition of anonymity, he said no decision has been made on deployment of the anti-missile missiles in Korea, though negotiations are under way between the two countries.

"I understand that the U.S. Government has not yet made a final decision on whether the U.S. forces in Korea should be equipped with Patriot missiles," he said. "I think the missiles will be deployed after Seoul and Washington reach agreement on the number of missiles and the date of deployment, considering any possible developments in the situation related to North Korea's nuclear weapons program."

Washington has not pressured Seoul to buy U.S. weapons, the official said, commenting on local press reports that the Pentagon has asked Korea to buy airborne self-protection jammers for the Korean fighter program.

A letter reportedly sent by U.S. Defense Secretary-nominee William J. Perry to Defense Minister Yi Pyong-tae asking Korea to buy jammers for the Korean Air Force's F-16 fighters was not meant to apply pressure, but to advise that production of the jammers has been suspended due to problems with the weapon, he said.

Only some of the 120 F-16 fighters Korea is to import will be equipped with the existing model of jammers and the rest with a modified new model, he said, adding that the United States has not given up the airborne self-protection jammer project despite suspending production.

"Nobody knows at the moment whether North Korea will allow the International Atomic Energy Agency to inspect its nuclear facilities," the official said, "and the government does not want the North Korean nuclear issue to go to the UN Security Council and thus to heighten tensions on the Korean peninsula."

"There is no discord between Seoul and Washington over the North Korean nuclear issue and the two governments are maintaining close cooperation."

The opposition Democratic Party is angry about the U.S. Government's reported pressure on Korea to buy the jammers.

In a statement issued on Friday, party spokesman Pak Chi-won said, "I feel indignation at U.S. Defense Secretary-nominee William Perry's pressure for Korea to buy defective radar jammers through channels outside the usual ones in weapons trade between the two countries. The government should make public this pressure and seek a new diplomatic approach toward the United States, defying such pressure."

Perry's letter to Defense Minister Yi will damage the two nations' traditional friendship, he said, urging the U.S. Government to reflect on whether the letter is tantamount to regarding Korea as a disposal site for defective weapons.

Washington should "apologize for the letter," he added.

BOSNIA-HERZEGOVINA

Muslim Artillery Using 'Chlorine-Based Toxic Gases'

LD0702162894 Zagreb Radio Croatia Network
in Serbo-Croatian 1100 GMT 7 Feb 94

[Report by correspondent Zdenko Vranjes]

[Text] Artillery and infantry fighting in the area of Kiseljak and Kresevo and in the vicinity of Novi Travnik intensified this morning. Infantry clashes were most intense around Kresevo where last night the HVO [Croatian Defense Council] repelled a powerful infantry attack by Muslim forces, inflicting huge losses on the attackers.

This morning Muslim artillery has pounded villages around Kiseljak. Civilians were wounded in the village of Lepenica but no exact casualty figures are yet available.

Novi Travnik and the surrounding villages, especially the village of Rastoci and Relej hill, again came under artillery and mortar attacks from the Muslim army. HVO military sources have said that in these attacks the Muslim army has been using shells filled with chlorine-based toxic gases.

At 0800 this morning a general alert was sounded in Mostar again. In mortar attacks by Muslims on the western part of Mostar [Croat-held] yesterday and throughout the night four civilians were wounded.

CZECH REPUBLIC

New Law Restricts Advertising, Promotion of Arms Sales

AU0102122294 Prague MLADA FRONTA DNES
in Czech 31 Jan 94 p 2

["km"-attributed report: "Arms Sales Advertising To Be Limited"]

[Text] Prague—The promotion and advertising of arms, as well as their sales, can be conducted, according to the new law, only by licensed arms dealers. To date, any businessman with a general enterprise license could offer arms and military technology for sale.

Bretislav Gregr, director of the License Administration at the Ministry of Industry and Trade, said that the tightening of the conditions was caused by instances that unnecessarily damaged the reputation of the republic. He gave an example of a citizen who had nothing to do with arms dealing advertising the sale of handguns and submachine guns in a foreign journal. Some people even offered tanks and airplanes abroad. "We have begun to receive notes through diplomatic channels asking how it is possible that these individuals can offer arms without any restrictions," Gregr said.

BRAZIL

Senate Gives Final Approval to Nuclear Safeguard Agreement

PY1002000694 Buenos Aires NOTICIAS
ARGENTINAS in Spanish 2051 GMT 9 Feb 94

[Text] Brasilia, 9 Feb (AFP-NA)—After introducing a controversial amendment, the Brazilian Senate today gave final approval to a quadripartite agreement with Argentina, the IAEA (International Atomic Energy Agency), and the ABAC (Brazilian-Argentine Agency for Accounting and Control of Nuclear Material).

The document was approved after inclusion of the supplemental adjustments [ajustes subsidiarios] that already had been negotiated by Itamaraty and IAEA, which were imposed by senators who even threatened to reject the project.

The adjustments will preserve Brazilian technological secrets, but will permit special ABAC and IAEA inspections of any nuclear materials produced by Brazil.

Foreign Minister Celso Amorim, who was fully satisfied with the agreement, will be able to travel to Bonn—he will leave on 21 February on an official visit to Germany—without fearing that his interlocutors may threaten to adopt retaliatory measures, which would have been likely had Brazil failed to ratify the agreement.

A report indicated that ABAC is making an inventory of Argentine and Brazilian nuclear facilities and materials, and the IAEA will make an inspection in the two countries within the next 60 days.

For Brazil, the ratification was something totally new because the country had never ratified a nuclear safeguard agreement.

The quadripartite agreement is broader than the Tlatelolco Treaty, which includes all Latin American countries. The voting on the ratification of this treaty had been postponed (perhaps for today or a date after Carnival).

Today's debate, which lasted more than two hours, developed after a Senate request for an amendment, which was finally approved and establishes that "all changes to supplemental adjustments will be approved by Congress."

Naval Nuclear Program To Double Processing Capacity

PY3101193694 Sao Paulo VEJA in Portuguese
26 Jan 94 p 41

[From the "Radar" column by Ancelmo Guis]

[Text] The Navy's nuclear program will double its processing capacity by the end of the year. The Aramar Center in Sao Paulo will add 900 centrifuges in addition to the 600 already available for enriching 400 kg of uranium a year. The Aramar Center will be inspected by international organizations to verify if the energy being produced is for peaceful purposes. This will bring an end to the suspicion that the program seeks to make an atomic bomb.

Nuclear Industrial Complex Reorganizing

PY3101193394 Sao Paulo GAZETA MERCANTIL
in Portuguese 28 Jan 94 p 17

[Article by Fátima Belchior from Rio de Janeiro] [Text] The overall entrepreneurial complex created in the 1970's to support the Brazilian nuclear program—Nuclebras [Brazilian Nuclear Corporations, Inc.], six subsidiaries, and a fuel element plant—are undergoing one more reorganization. Nuclear Industries of Brazil [INB], which in 1988 replaced Nuclebras and lost some of its original functions, is dismantling three subsidiaries: the Brazilian Uranium Co., Nuclemon Mining and Chemicals Ltd., and Nuclei [Nuclebras Isotope Enrichment, Inc.].

INB President Roberto da Franca on 26 January said: "We are readjusting the industry to its real needs." He added that by transforming the three subsidiaries into departments, the company will save \$1.27 million per year. The number of INB board members (directors and advisers) will decrease from 43 to 14, while the number of management employees will decrease from 83 to 56.

The Nuclebras system was created in 1975, one year after the Brazilian-German Agreement was signed to support the activities of eight nuclear plants. So far, Brazil has only one plant, Angra-1, which was not a result of the agreement signed with the Germans and normally operates at half its capacity. In addition to that, the completion of Angra-2's construction is not entirely ensured. Angra-2 will be the first plant to use German technology (Angra-1 was negotiated with U.S. Westinghouse). As a result, the overall system has no clients for its products: uranium, enriched uranium, and fuel elements.

Activities linked to the nuclear program have been decreasing slowly although the idea to build eight nuclear plants was discarded a long time ago. In 1986, two years before being transformed into the INB, Nuclebras and its subsidiaries had almost 6,000 employees. Currently there are 1,200. This number probably will decrease as a result of the changes being implemented by the INB. So far, Franca has not mentioned dismissals. He prefers to talk about reappointment, particularly in the experts' area, through accords being signed with Furnas [Furnas Electric Power Plants, Inc.] and the National Nuclear Energy Commission (CNEN), to which the INB is linked.

Originally, Nuclebras worked with the following subsidiaries: Nuclemon [Nuclebras Monazite and Associated Elements, Ltd.] (monazite sand exploitation), Nuclam [Nuclebras Mining Assistance, Inc.] (uranium prospecting), Nuclei [Nuclebras Engineering, Inc.] (nuclear plant engineering), Nucom [Nuclebras Nuclear Plant Construction, Inc.] (nuclear plants construction), Nuclep [Nuclebras Heavy Equipment, Inc.] (nuclear plants heavy equipment), and Nuclei (uranium enrichment). Nuclebras also was linked to the Fuel Elements Plant (FEC).

Currently, Nuclei belongs to Eletrobras [Brazilian Electric Power Company, Inc.] and Nuclep has been included in the privatization program. Nuclam and Nucom already have been dismantled and will be followed by Nuclemon, Uranium of Brazil (which was established together with the

INB), and Nuclei. According to Franca, the overall complex will now operate with a president and four directors.

Nuclei, which was built in Resende to enrich uranium through the jet nozzle process, was not successful. Franca added that the Brazilian Government has chosen to adopt the ultracentrifugation process developed by the Navy Special Projects Coordinating Board (Copesp). This is why the company is being dismantled and the personnel being absorbed by the INB.

Uranium of Brazil, which was established to produce uranium and its concentrate, was out of operation for four years due to lack of demand on the domestic and international markets. The product could not be exported in view of its very low price. Nearly \$8 million would have to be invested in Nuclemon to make the installation of a chemical plant to extract chloride [not further identified] from rare types of sands feasible.

Waiting for Angra-2

The INB has a \$40 million yearly budget resulting from the sale to Furnas, which operates Angra-1, of fuel produced in its Resende plant. With these resources, the company covers 50 percent of its expenses. The rest is supplied by the central government.

Franca believes that when Angra-2 goes into operation the company will have the required conditions to become self-sufficient because then it will have one more customer for its fuel element. "Angra-2 is vital to the INB complex because it will ensure that uranium exploitation will continue, the FEC remains in operation, and we will achieve more technological knowledge," Franca said.

INB investments for 1994 are not very significant: Franca plans to have from \$2 million to \$3 million to invest in new machinery for the FEC and to adapt Nuclei (where the process of enriching uranium through a jet nozzle was developed) for the production of pills [pastilhas], which are a component of the fuel element. Currently, these pills are only produced abroad.

There are more ambitious plans: to sell FEC components to Siemens (German) reactors, which must be qualified abroad; to rent Uranium of Brazil facilities to the private sector; and several other initiatives.

Editorial Underlines Importance of Nuclear, Patents Bills

PY2801201894 Sao Paulo O ESTADO DE SAO PAULO in Portuguese 27 Jan 94 p A3

[Editorial from the "Notes and Information" page: "Difficulties Ahead"]

[Text] The Foreign Ministry has an almost impossible task ahead: to defend Brazilian interests without the cooperation of the Senate, which has been making decisions affecting foreign policy. In an interdependent world—regardless of

whether we agree with it—many domestic policy decisions end up becoming part of a conflict with other nations, which are sometimes more powerful than Brazil and can impose conditions during a negotiating process.

The Senate is currently debating two items that have a strong effect on our relations with the United States:

1. The approval of agreements between Brazil and Argentina and the quadripartite agreement between Brazil, Argentina, the nuclear agency created by both governments, and the International Atomic Energy Agency—all related to the international supervision of the Brazilian nuclear program—and;
2. the approval of the law on patents.

The delay in approving the agreements has produced all kinds of negative effects. Now only a very swift and expeditious Foreign Ministry action will be able to make the members of the select nuclear club believe that Brazil does not have a second purpose in developing its nuclear program. The damage produced by the delay in approving those agreements affects the image of Brazilian diplomacy, and wears out our relations with the nuclear club, but it does not produce immediate damage to the country's economic interests. The delay in voting on the intellectual property law has doubly negative effects, as it affects the image of the country's diplomacy and hurts it economically.

The Senate seems incapable of realizing that the U.S. Government—following U.S. domestic laws and subject, without the shadow of a doubt, to reasonable pressures—has designated the month of February for verifying whether or not the legislation on intellectual property rights in Brazil contemplates certain requirements. If the answer is negative, that country will apply sanctions on Brazilian exports. The problem for the Brazilian Foreign Ministry—which at the beginning of the month will send the Foreign Ministry secretary general to Washington to attempt, once more, to postpone a judgment on the question—is that the U.S. position is sometimes so oblivious to reality that it is comparable to that of some Brazilian industrial groups.

These national groups are blind to the fact that the economy today has a global scope, and that all states do not have equal power. On the contrary, the new scope accentuates the differences between states. The Americans, on their part, appear to be virtually blindfolded in that they fail to realize that the Brazilian Government also suffers pressures, and must also take the national interests it represents into account.

What is important to bear in mind, for as long as the Americans do not make a decision, is that the Senate must act if it wants to influence foreign policies. You cannot support old rhetoric and simply refuse to vote on items that are important for our foreign affairs agenda. You cannot implement policies, much less foreign policies, by omission—particularly when on the other side of the table is a party that wants action, and can demand it by applying sanctions.

ALGERIA

Reactions to Dedication of Nuclear Reactor*94WP0045A Algiers EL MOUDJAHID in French
22 Dec 93 p 3*

[Interviews with officials following nuclear reactor dedication, by M.B. and A.B.; place and date not given]

[Text]

Mr. Li Dingfan, Head of the Chinese Delegation: 'A Sound Base for Scientific Development in Algeria'

Vice-minister of the People's Republic of China, Mr. Li Dingfan is also vice-president of the Chinese Atomic Energy Agency and a university professor. In addition to his functions, he was heading the Chinese delegation that helped build the Es Salem reactor. He kindly answered our questions on this project, which constitutes a symbol of Algerian-Chinese friendship.

EL MOUDJAHID: How would you evaluate this project?

Dingfan: Today is a joyful day for everybody. It is an important page in Chinese-Algerian collaboration. It is memorable. I expressed this in writing in the visitors' book. I hope that this blossom of nuclear science and technology, grown by the Algerian and Chinese parties, will bear fruit as soon as possible.

EL MOUDJAHID: What does this project mean to you?

Dingfan: It is the living symbol of cooperation in development through energy. At least, it is a sound base for scientific development in Algeria. We may say that it boosts the Algerian people's reputation throughout the world.

EL MOUDJAHID: Will the Algerian-Chinese cooperation in the nuclear sector continue?

Dingfan: If there is a desire for cooperation, there is no doubt that we shall be available and present. We have been collaborating for six years.

I hope that Algeria will be able to continue its development peaceably and peacefully. I wish that the people may enjoy the benefits of this reactor.

Mr. Abdellah Laid (Doctor in Nuclear Physics): 'Possibilities for Serious Work'

Being a researcher at Ain-Oussera is not a pleasure; it is a passion which, alone, makes it possible to overcome all problems. Mr. Abdellah Laid is head of research at the physics department. He talked to us about it.

EL MOUDJAHID: How important would you say this reactor is?

Laid: It is very important for the future of the nuclear sector in Algeria. The entire nuclear sector will be concentrated around this site. The reactor design will allow the peaceful use of nuclear energy. For instance, we will be able to dope selenium, to produce radioisotopes, which are very important in Algeria for nuclear medicine and for the industry. Studies and surveys of manufacturers and hospitals throughout the country have shown that there is a large

demand for radioisotopes. This reactor being equipped with irradiation channels, we can produce these radioisotopes for medicine and the industry. For research and agriculture, some radioisotopes are currently used in small amounts, but we can supply more now that we have this reactor.

EL MOUDJAHID: Could you tell me where you studied?

Laid: I have a doctorate in nuclear physics. I studied my specialty in England for a few years.

EL MOUDJAHID: Have you received offers to work in other countries?

Laid: Yes, but I preferred living in my country. It is very important for us. Especially considering that, this time, things are taken seriously and we have the possibility of doing serious work.

EL MOUDJAHID: Could you tell us how much you get paid?

Laid: I cannot tell you. But it is insignificant compared with foreign offers. I am not interested in money; rather, I am interested in encouraging researchers and having them work around this tool. We have here a great many researchers who deserve every kind of encouragement.

The Minister of Foreign Affairs: 'A Symbol of the Strengthening of Peace and Security'

EL MOUDJAHID: Mr. Minister, how would you evaluate this new nuclear acquisition?

Minister: It is a universal factor for anything that has to do with the use of nuclear energy for peaceful ends, especially in the sectors of agriculture, health, and of course energy. Many countries produce nuclear electricity. In Algeria, there are huge potential uses for nuclear energy, including the desalination of sea water. Today, we very explicitly mentioned that our nuclear program was set up for peaceful purposes. Algeria solemnly announced that it now intends to adhere to the nuclear nonproliferation treaty. This rules out any possibility of using it for military purposes. That was the message given at this inauguration. At the same time, we wanted the inauguration to take place under conditions of absolute openness. The international press as well as the entire diplomatic corps accredited in Algiers were present. This project is a symbol of the strengthening of international peace and security. It also shows that our country possesses a powerful scientific and technological potential, that Algeria is the kingpin of Maghreb and that it currently contributes much to consolidate not only Maghreb unity, but also everything that contributes to the economic, cultural and social development of the Maghreb community.

EL MOUDJAHID: How would you evaluate relations between Algeria and the International Atomic Energy Agency [IAEA]?

Minister: Mostly, we should note that we have excellent relations with the IAEA. Its general director just sent a message on the occasion of this inauguration.

EL MOUDJAHID: This inauguration coincides with the 35th anniversary of the establishment of diplomatic relations between Algeria and China. How would you evaluate these relations?

Minister: First, I would point out that these relations developed satisfactorily since, during our national liberation struggle, China was one of the first countries to recognize Algeria as a sovereign state aspiring to independence. After independence, we developed our relations and strengthened them in the economic, commercial, and cultural sectors. This Ain Oussera center is the best example of the development of our relations.

The Minister of National Education: 'The Hard Core of Research'

EL MOUDJAHID: Could you tell us why it was the Ministry of National Education that was the nuclear reactor project leader?

Minister: This project is in line with Algeria's research policy. The research sector depends on the ministry delegated to higher education which, as its name indicates, is itself delegated to the Ministry of National Education.

EL MOUDJAHID: What benefit does Algeria derive from this reactor project?

Minister: It is an important, even a decisive stage, following the first stage, which was that of the Nour reactor. The latter was a 1-MGW [as published] research reactor. The new Essalam reactor has a 15-MGW power output; in other words, it allies research and production, especially the production of radioisotopes for agriculture, medicine, and pharmacy. It is also a future provider of services for product control and analysis through nuclear methods. We have reached a stage where Algeria can use this nuclear tool for its economic and social development.

EL MOUDJAHID: What benefits did Algeria derive from the operation of the first Nour reactor?

Minister: In spite of its modest capacity, Nour enabled Algerian researchers to access the nuclear field for the first time. Note that this is the peaceful nuclear field since we are talking about peaceful nuclear activities. Nour enabled us to access this huge and extremely complex field, to familiarize us with it, and it enabled our researchers to master the essential aspects of nuclear-related research.

EL MOUDJAHID: Is the research personnel entirely Algerian?

Minister: Yes, 100-percent Algerian; but we wish to increase their number. According to our Chinese friends' evaluations, Algerian researchers are of appreciable quality. They are young, very dynamic, dedicated in spite of difficult living conditions. Some are away from their families. Therefore, we should train more personnel so as to provide this reactor with optimum human capacities in order to benefit from all the possibilities it offers. Currently, there are fewer than 100 researchers and technicians; we should increase that number to 300 researchers, technicians, and engineers.

EL MOUDJAHID: On several occasions, technicians and researchers mentioned their difficult working conditions. Have you considered taking care of their complaints?

Minister: First, I would like to say that most of them were educated in Algeria, in universities and research institutes. We have 17 research centers, this is the 18th; in a way, it is the hard core. Its personnel was educated in Algerian schools and Algerian universities. I just promised them that we would very seriously consider the matter of their material living and working conditions. We must improve these conditions.

The Minister of Agriculture: 'Multiple Applications'

The impact on agricultural production is manifold. Applications to agronomic research are varied. To study problems of nutrition or fertilization, we often use fertilizers that have been rendered radioactive so we can see what happens to these elements in plant nutrition. There are various applications in plant biology, in conservation, and even in seawater desalination.

If we can manage to control desalination costs through the use of nuclear energy, it will be extremely useful for agriculture, through many future projects, for instance, in irrigation. The only problem is one of cost. At any rate, as far as conservation or fertilization are concerned, applications have become quite common in certain countries.

This might happen in our country, too. If we put our agricultural economy in order. The center is there; so are the researchers, and the land close by; all we have to do is to create the environment required to mobilize these capacities and technologies in order to enable certain sectors to use nuclear energy.

INDIA

ISRO Chief Views Cryogenic Engine Plans, U.S. Embargo

*BK0202033294 Delhi INDIAN EXPRESS in English
28 Jan 94 p 9*

[Text] Bangalore—Indian Space Research Organisation (ISRO) Chairman UR Rao admitted on Thursday that the Russians had gone back on the cryogenic rocket deal, but said talks between Glavkosmos, the Russian space agency, and the ISRO on the issue were still not over.

"The Russians have expressed their inability to extend the transfer of technology. That is a fact. We are now re-negotiating and seeing what can be done on that," he said. Rao was speaking to the Press following the inauguration of the Karnataka Hybrid Micro Devices Limited (KHMD), an enterprise set up under the ISRO entrepreneur development programme.

Asked to verify Moscow-based reports that the Russians were willing to supply an increased number of cryogenic engines in lieu of the technology transfer, Rao said in diplomacy several methods are used by negotiators, one of which includes the issuing of all kinds of statements. "Some people will express their perceptions of the situation, however, we will announce something only if we are satisfied."

Asked whether the US embargo on ISRO will be lifted in view of the jettisoned cryogenic deal, Rao said now the Americans ought to lift the embargo as the facts of the deal falling through had received wide publicity. However, ISRO would not approach the Americans and ask them to lift the embargo. "I don't care what they (the Americans) do. They are the ones who imposed the embargo. It is up to them to lift it," he said.

Rao agreed that embargoes were a nuisance but pointed out that ISRO had enough past experience with them. Many dual-use technologies were not available to ISRO and even mundane items such as the wheels for the mobile rocket-launching tower were not given to ISRO in the past. "We had to make it ourselves," he said. "Fundamentally a sovereign country like India has to develop its own capability in high technology. We cannot become a global competitor if we cannot stand on its own two feet."

Pointing out that any country with any high technology held on to it, preventing other countries from acquiring it, he said: "We must develop our own technologies because the market is right here. We must take advantage of it." Rao related the apocryphal story of an aspirin manufacturer who said that if every Indian and every Chinese took one aspirin a day, then he would not have to worry about the rest of the world.

Rao reiterated that India's own cryogenic engine would be ready in four years. "Nothing will stop us from making it by 1998. I say this with the biggest confidence because of the kind of people we have working in the Space Department." Rao said ISRO already had its fuel manufacturing facilities at Mahendragiri and testing facilities are being developed speedily. ISRO had built a one-tonne cryogenic engine which had been tested extensively. "Most of the problems in building a bigger engine we will be able to tackle. We do not foresee any major technical-problems," he said.

Rao pointed out that the Russian contract had been entered into after ISRO had decided to go into indigenous manufacture of cryogenic engines. "We did not go to anybody for the engines. They came to us," he said. First it was General Dynamics of the US, then Ariane of France and finally Glavkosmos. Rao said, while ISRO had refused the earlier offers, it had accepted the Russian offer as it was cheap and it was felt it would cut down the time needed to develop an indigenous engine.

However, now that renegotiations are on, Rao said whatever was agreed to, ISRO would not accept an increase in price. The original contract stated a price of Rs [rupees] 235 crore in Indian rupees. "We will not pay more than this," he said.

'Milestone' in Fast Breeder Reactor Output

94WP0055B Madras THE HINDU in English
16 Dec 93 p 3

[Article: "FBTR Output Up, a Milestone at Kalpakkam"]

[Text] Madras, Dec. 15, The Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, reached a milestone in operating its Fast Breeder Test Reactor when it raised its power output from 8 to 9 MW at 3 p.m. today.

According to Mr. S.B. Bhoje, director, Reactor Group, the output would be further raised to 10 MW tomorrow morning and to 10.5 MW in the evening.

"Everything is working very nicely. We reached another milestone at 3.45 p.m. today, when we completed 10,000 hours of operation after the FBTR attained criticality in 1985. Much of the 10,000 hours was achieved in 1992 and 1993," said Mr. Bhoje.

The IGCAR scientists and engineers would operate the FBTR at 10.5 MW for four days. Later, they would do reactor physics experiments on the core kinetics and engineering tests on the plant dynamics.

With today's performance, there was a bright chance of power from the FBTR being wheeled into the Tamil Nadu Electricity grid in January 1994.

The latest developments follow the Atomic Energy Regulatory Board clearance for raising the output after various checks.

The FBTR output would be raised to 12.5 MW in a few months and it would reach its full capacity of 40 MW (thermal) in two years, said sources in the Atomic Energy Commission.

The FBTR is a forerunner to India's ambitious Prototype Fast Breeder Reactor with a capacity of 500 MW (electrical).

Long-Range Surface-to-Air Missile Successfully Tested

BK0402163594 Delhi All India Radio Network in Hindi
1515 GMT 4 Feb 94

[Text] In yet another technological breakthrough, India has successfully test-flown the long-range surface-to-air missile Akash [Sky] at the interim test range near Chandipur in Orissa. The innovation is the technology of the integrated two-stage rocket ramjet propulsion, placing India in the club of three nations to have achieved such capability. The Akash missile has a range of 25 km.

Further on Successful Test of 'Nag' Missile

BK0802114594 Delhi THE HINDUSTAN TIMES
in English 1 Feb 94 p 12

[Text] New Delhi, Jan 31—The Defence Research and Development Organisation (DRDO) successfully conducted four flight tests of the modern anti-tank missile "Nag" [Cobra] during the last two days.

The Nag missile is a third-generation missile with the range of about four km and a top-attack capability for defeating advance armour.

The recent tests were conducted with a missile carrier track vehicle in the user configuration which was developed by the DRDO in partnership with the Indian industry. The trials included the use of a state-of-the-art thermal sight developed by DRDO.

"Nag" missile is expected to be ready for induction into the Army by 1996.

India is one of the three countries that are developing this class of advanced missiles.

Scientist Says Prithvi Flight 'Tremendous Success'

94WP0052 Bombay *THE TIMES OF INDIA* in English
6 Dec 93 p 8

[Text] Bombay, December 5—The father of India's missile programme and scientific adviser to the defence minister, Dr A.P.J. Kalam, today emphasised the need for integrating the country's technological strength for the success of any scientific project.

Dr Kalam was delivering the keynote address at the silver jubilee function of the aerospace engineering department of the Indian Institute of Technology (IIT) Bombay. Prof J. Chandrashekar, head of the aero-engineering department, welcomed the gathering.

Citing an example of the successful integration of technological strength, he said that 30 key institutions in the country participated in the "Prithvi" surface-to-surface missile programme of which six were academic.

Dr Kalam said that the last of the technology demonstrations flights of the "Prithvi" was carried out a week ago at Balasore and it was a tremendous success. "Watching it enter target zone correctly, I realised the importance and value of integrating technological strength," he said.

The chief architect of India's space programme said that for the supersonic combustion programme four groups were jointly working. These were IIT, Madras, the national aerospace laboratory, the Indian Institute of Science and the defence Research and Development Laboratory.

According to Dr Kalam, India needed supersonic combustion for hypersonic flight and the initial test results in this area were satisfactory.

Talking about power plants for aerospace systems, he said, the "Kaveri" engine was being developed for the prestigious Light Combat Aircraft (LCA). He said that the engine was expected to go into production in 1997 while the tests were expected to start next year—1994.

Emphasising the importance of cryogenic engines for India's programme, Dr Kalam, said that in such critical areas "we should develop it indigenously."

However, since some foreign nations had a lead time of 10 to 15 years, ISRO did not want to lag behind in its programme and decided to acquire it.

Dr Kalam said that the third stage of the Geo-synchronous Launch Vehicle (GSLV) would have a cryogenic engine.

"Our missile programme will never use cryogenic engines. If people abroad say that we would be using it, it is absurd," he said.

At yesterday's lecture, he said that in the whole of Asia, India had the largest number of aerospace development programmes.

According to him for many aircraft and related projects international participation would become a reality.

At present in India about 50 public sector and private sector companies, 200 industries, 20 academic institutions and 30 research and development laboratories were participating in aeronautical projects.

"A confidence has been built up in the aeronautics community not only can it build military aircraft, but it can also enter into development and production of civil aircraft with international collaboration," he said.

Development of Antiballistic Missile System Studied

94WP0047 Bombay *THE SUNDAY TIMES OF INDIA*
in English 26 Dec 93 p 7

[Article by Srinivas Laxman: "DRDO May Develop Anti-ballistic Missiles"]

[Text] Bombay, December 25—The Defence Research and Development Organisation (DRDO) is currently carrying out a feasibility study to develop what is known as an "anti-ballistic missile system."

The aim of this system is to guard against incoming missiles from rival countries.

The first hint of such a project came from the chief of air staff, Air Chief Marshal, S.K. Kaul, who expressed the need of an "anti missile-missile system," while addressing a news conference at Avia-India 93, during the Bangalore air show, last week.

Subsequent inquiries made by this correspondent with aerospace scientists at the air show threw light on the fact that a feasibility study for such a project was being carried out.

They, however, emphasised that no firm decision as yet had been taken regarding the matter.

The final decision, as with other projects, lay with the Union cabinet which would go into all aspects, particularly the financial implications and the political fallout, before giving the green signal, they said.

Speculation in aerospace circles pointed to the possibility of the anti-ballistic missile system being based on the formidable "Akash" system.

The "Akash" system utilises the "Rajendra" multi-function phased array radar in a ground support role which has been developed for the first time in India.

It is capable of multiple targeting, surveillance and missile handling. The phased array radar was on display at the air show and drew a lot of interest from foreign delegates.

In another significant development, about 80 per cent of the structural components for the prototype of India's Light Combat Aircraft (LCA) have already been fabricated.

The LCA has been designed as a total weapon system where the aircraft constitutes a precision weapon launch platform which can carry and deploy a wide range of weapons and stores with a quick turnaround time.

Rao Chairs Meet on Chemical Weapons Convention

94WP0048 Bombay *THE TIMES OF INDIA* in English 25 Dec 93 p 7

[Text] New Delhi, Dec. 24 (PTI)—The Prime Minister, Mr P.V. Narasimha Rao, has said the Chemical Weapons Convention (CWC) is a great step in the direction of disarmament.

Chairing the consultative committee meeting of the ministry of chemicals and fertilizers here last evening, he said the most important pillar of any disarmament process is verification.

In the case of the CWC, every nation has accepted the concept of verification. He said the CWC is non-discriminatory in its approach and therefore the verification methods adopted in the CWC can be compared with similar efforts in the direction of disarmament.

The Prime Minister pointed out that India has been instrumental in bringing about this convention.

Emphasising that India is not making any chemical weapons and it has nothing to hide, the Prime Minister said India plans to train the chemical industry in such a way that they are able to protect their chemical secrets while undergoing the inspection process.

The Prime Minister underlined that India has the necessary equipment infrastructure facilities and trained manpower to protect itself against any possible misuse of such inspections.

In his opening remarks, the minister of state for chemicals and fertilizers, Mr Eduardo Faleiro, said that growth and development of chemical industry in India is taking place at a faster rate.

In case the country is not a signatory, trade related imports-exports will be affected very seriously as non-signatory parties will have to undergo restrictions in importing as well as exporting chemicals with respect to the signatory state parties.

The minister said the signatory parties will enjoy freedom in transferring these chemicals among themselves. He informed the members that 146 countries have signed this convention which was concluded on January 14 this year.

Giving details of the connection, Mr Faleiro said it prohibits development, production acquisition, stock-piling, transfer and use of chemical weapons and their precursors.

However, each state party has the right to develop, produce, otherwise acquire, retain, transfer and use toxic chemicals and their precursors for legitimate purposes, the minister added.

It was originally envisaged that the convention would come into force in the beginning of 1995. The latest indication from the provisional Organisation for the Prohibition of Chemical Weapons (OPCW) is that the treaty may come into fore by middle of 1995 or latest by December 1995.

Panel for Authority on Chemical Weapons Formed

94WP0049 Madras *THE HINDU* in English 4 Dec 93 p 6

[Text] New Delhi, Dec. 3—The Government has set up a nodal committee of secretaries, presided over by the Cabinet Secretary, to study the structure of the proposed National Authority being set up to meet obligations under the Chemical Weapons Convention. Three groups have been set up under the committee, of which one is headed by the Secretary, Chemicals and Petrochemicals.

The Convention is to come into force in the beginning of 1995 with the international secretariat being established in the Hague while each signatory nation is to set up a national authority. A strong technical support structure required for this in the shape of trained manpower and laboratory back up is also being planned.

This was disclosed here today by the Minister of State for Chemicals and Fertilizers, Mr Eduardo Faleiro, while addressing the Parliamentary Consultative Committee attached to his Ministry.

Mr. Faleiro told members that the National Authority will collect, transmit and obtain data relating to chemicals identified in the Convention. It will also oversee the need to ensure that Indian production facilities do not get over-exposed to international inspections of such facilities.

He felt this was most important since technology needed to be guarded and inspection should not become a means for obtaining information which could allow for duplication of such technology in other parts of the world.

Mr. Faleiro noted that the Convention is non-discriminatory and non-confrontationist in its approach and seeks to eliminate all chemical weapons within a fixed time frame. Chemicals which come under schedule III, however, have a dual purpose as many of them can be used for weapons but also have important benign uses in production of pharmaceuticals and pesticides. Signatory nations will not have any unfair intrusions into the way they utilise these chemicals, apart from keeping a centrally established nodal international secretariat informed about production, storage and trade in such weapons.

The Government will work closely with the chemical industry to finalise measures to implement the provisions of the Convention. Interaction with industry has already begun as several meetings have taken place between industry representatives and the Department of Chemicals during which implications of the Convention have been conveyed to them.

The Minister stressed that it was essential for the Government and industry to work together to ensure that the international secretariat is not able to build a case against any production unit in the country. This was all the more important since it is well established that we have no chemicals weapons activity in the country.

He said the implications of the Chemical Weapons Convention on the industry mainly relate to becoming more transparent in its functioning and in reporting details of production and sale.

Official Admits Ability To Produce Enriched Uranium

BK2801143294 Delhi PATRIOT in English 22 Jan 94 p 5

[By United News of India]

[Text] Bombay, Jan. 21—The Tarapur Atomic Power Station (TAPS) will switch over to indigenously developed mixed oxide fuel (MOX) in a phased manner from its next refueling stage in February, shedding its dependence on imported enriched uranium for power generation, Nuclear Power Corporation managing director S.K. Chatterjee said on Thursday.

Mr. Chatterjee told news persons that this would be the first experiment of partly using the indigenous fuel to operate the Tarapur Atomic Power Plant in view of the uncertainty about renewal of supply of enriched uranium from France under the India-U.S.-France tripartite agreement which ended in October.

He said that to begin with, two bundles of mixed oxide fuel along uranium stock from the previous contract was over, would start using a mix of low-enriched uranium and MOX at the TAPS.

Mr. Chatterjee said "We are [word as published] no fuel problem till the end of 2,000 AD."

However, he said the options for procuring enriched uranium would continue to be explored. "We would buy it from whosoever was willing to give it to us," he said while asserting that "enriched uranium or no enriched uranium, we have to, and will run TAPS and have uninterrupted power generation."

Mr. Chatterjee said the Atomic Energy Commission chairman had already said that India had the capacity to run the two units of TAPS project—one indigenously—and also had the capability to produce enriched uranium.

Indian scientists had fully perfected the art of producing MOX and using it as a substitute to enriched uranium for operation TAPS.

Mr. Chatterjee said TAPS would complete successful operation of 25 years on April 1, 1994 and enter into the 26th year. "We will run it for another 14 years."

He said the safety assessment for renewal of operations had already been completed by SARRA [expansion unknown] after inspection.

Nuclear Plant Facilities Adequate for Emergencies

94WP0056A Madras THE HINDU in English 17 Dec 93 p 6

[Article: "Facilities in N-Plants Adequate To Deal With Emergencies"]

[Text] New Delhi, Dec. 16. The emergency preparedness plans of nuclear installations in the country are considered adequate, the Rajya Sabha was told today.

Before a nuclear installation began operation, its management prepared an emergency response plan in accordance with the guidelines of the atomic energy regulatory board, the Minister of State in the Prime Minister's Office, Mr. Bhuvnesh Chaturvedi, told Mr. Ghufan Azam and K.K. Birla in a written reply.

The offsite emergency response plan was also approved by the State Government concerned.

In order to maintain a state of readiness to combat any emergency, training courses and regular exercises were conducted for plant site as well as off-site areas, he said.

The feed-back of such exercises was recorded and the emergency preparedness plans were reviewed to make improvements, if any, for enhancing their effectiveness.

Technology upgradation: Mr. Chaturvedi said the Government had decided to upgrade the technology of turbine generators for atomic power plants manufactured by the public sector Bharat Heavy Electricals Limited in the wake of a fire accident in the Narora Atomic Power Plant.

The Minister said the Government had already received the enquiry committee report on the Narora accident and steps were being taken to prevent the recurrence of such a fire.

He said the committee was of the view though the fire was serious in nature, it was not a major accident.—PTI

IRAQ

UN's Ekeus 'Not Fully Satisfied' on Chemical Weapons

NC0702205794 Paris AFP in English 1957 GMT 7 Feb 94

[Text] Kuwait City, Feb 7 (AFP)—UN disarmament chief Rolf Ekeus said here Monday [7 February] he was not convinced that Iraq had provided full details about its chemical weapons.

"We feel quite satisfied, but not fully satisfied," the head of the UN Special Commission on disarming Iraq (UNSCOM) told reporters, following his four-day mission to Baghdad.

"In the chemical area we are not satisfied that Iraq has given us full, detailed information necessary for us to be definite that all these weapons have been taken away," Ekeus said.

The Swedish UN official on Sunday ended a visit to Iraq saying Baghdad and the United Nations still disagreed over certain aspects of the long-term monitoring of Iraq's weapons programmes, despite their determination to implement the surveillance measures quickly.

Ekeus said Monday he was confident that all Iraq's long-range missiles had been destroyed, along with the production facilities.

"We have the satisfactory feeling that most of the Iraqi capabilities have now been destroyed and eliminated," Ekeus said, referring to the dismantling of Iraqi weapons programmes in line with the 1991 Gulf war ceasefire conditions.

In a joint statement issued in Baghdad Sunday, Ekeus and Iraqi Deputy Prime Minister Tariq 'Aziz said both sides "expressed their readiness to expedite the process of establishing ongoing monitoring and verification in a spirit of goodwill."

They said their aim was to enable the International Atomic Energy Agency to report to the UN Security Council "that, in their view, Iraq had taken all the actions called for by paragraph 22 of Resolution 687."

The clause provides for the lifting of the international oil embargo against Iraq once Baghdad has honoured UN resolutions calling for the elimination of Iraq's weapons of mass destruction.

UN sanctions, including an oil embargo, were imposed four days after Iraq invaded Kuwait on August 2, 1990.

Ekeus was due to leave Kuwait for New York Monday, Kuwaiti officials said.

Disagreements With UN Over Weapons Monitoring Still Exist

NC0602140094 Paris AFP in English 1335 GMT 6 Feb 94

[By Faruq Choukri]

[Text] Baghdad, Feb 6 (AFP)—A senior UN official said here Sunday the United Nations and Baghdad still disagreed over certain aspects of the long-term monitoring of Iraq's weapons programmes, despite their pledge to implement the measures quickly.

Rolf Ekeus, head of the UN Special Commission on disarming Iraq, told reporters after talks with senior Iraqi officials that "there are definitely different assessments" concerning the surveillance programme.

"There are still some question marks, and we have been working on them with some, but not complete, success during these talks," Ekeus said before leaving for Kuwait.

Ekeus, who arrived in Baghdad Wednesday, held talks with Deputy Foreign Minister Tariq 'Aziz, Foreign Minister Muhammad Sa'id al-Sahhaf and General 'Amir Muhammad Rashid, head of the military industrialization organization.

In a joint statement, Ekeus and Aziz said both sides "expressed their readiness to expedite the process of establishing ongoing monitoring and verification in a spirit of goodwill."

They said their aim was to enable the International Atomic Energy Agency (IAEA) to report to the UN Security Council "that, in their view, Iraq had taken all the actions called for by paragraph 22 of Resolution 687."

The clause provides for the lifting of the international oil embargo against Iraq once Baghdad has honoured UN resolutions calling for the elimination of Iraq's weapons of mass destruction.

Ekeus said he tried to emphasise in his talks with Iraqi leaders the "political ambience" surrounding the clause.

He was referring to the position of certain UN Security Council members, notably the United States, which oppose any lifting of the oil embargo until Baghdad recognises the sovereignty of Kuwait and improves its policy toward the Moslem Shiite and Kurdish minorities in Iraq.

Iraqi Foreign Ministry Under-Secretary Riyadh al-Qaysi, who spoke at a news conference with Ekeus Sunday, said Iraq had "implemented all that is required" under the clause.

However, last week U.S. President Bill Clinton said Iraq still had a long way to go toward compliance with the Gulf war ceasefire conditions, despite Baghdad's acceptance of UN Security Council Resolution 715 in November, which called for long-term weapons monitoring.

The joint statement issued by Ekeus and 'Aziz said the "intense phase" of UN inspections would continue, and Iraq had "indicated that it would welcome all such inspection teams and facilitate their tasks."

The two sides discussed technical matters in a "professional and business-like manner," the statement said, and their talks "yielded positive results."

They agreed to hold a further round of talks in the first half of March to maintain the momentum in the disarmament process.

In the hope of obtaining an end to the embargo, Baghdad is cooperating with efforts to dismantle programmes for nuclear, chemical and biological weapons, which are banned under the UN resolutions ending the 1991 Gulf war.

UN sanctions, including an oil embargo, were imposed four days after Iraq invaded Kuwait on August 2, 1990.

On Friday, IAEA officials said they would remove the last batch of Iraq's irradiated fuel next week and start setting up cameras at former nuclear sites.

The joint statement said Iraq and the United Nations had "built on the significant progress" made since last July, when the two sides discussed the possibility of lifting the oil embargo.

Iraq meanwhile reiterated its rejection of a plan to sell some of its oil under UN control.

Under UN Security Council Resolutions 706 and 712, Iraq is allowed to sell up to 1.6 billion dollars' worth of oil for six months under international supervision. The proceeds must be used to buy food and medical supplies, fund UN activities in Iraq, and pay war damages.

Russian UN Arms Inspector Says Mission Successful

NC3001174394 Paris AFP in English 1650 GMT 30 Jan 94

[Text] Manama, Jan 30 (AFP)—The head of a 16-member UN arms inspection team said here Sunday his just-ended mission to Iraq was a success, adding that Iraqi officials had promised to cooperate in setting up a monitoring system.

"We achieved all objectives," said Russian team leader Nikita Smidovitch, who told reporters his 10-day mission to Iraq had been "successful."

Smidovitch was inspecting Iraq's military arsenal under UN Security Council Gulf war ceasefire resolutions.

"The Iraqis had a forthcoming attitude," Smidovitch said. "Iraq has promised to cooperate and said they will do what they can to shorten the period" needed to set the monitoring process in motion.

He was to leave Manama, the United Nations' base for Iraqi missions, late Sunday.

The long-term monitoring of the Iraqi arms program is crucial to Baghdad's hopes for an end to the embargo imposed after the invasion of Kuwait in August 1990. By accepting Security Council Resolution 715, Iraq hopes to at least have UN sanctions on its oil exports lifted.

Asked how many missions were still needed before long-term monitoring could begin, Smidovitch replied? "Quite frankly, it will take time. We need more activities to set up the monitoring process."

The surveillance program is the next UN step following the destruction of Iraq's weapons of mass destruction after the Gulf war of January-February 1991.

Iraq agreed to the surveillance in November after rejecting it for three years and has been lobbying hard for an end to the embargo.

On Wednesday, the UN's deputy disarmament chief said long-term monitoring of Baghdad's weapons program was still some way off despite Iraq's efforts to have sanctions lifted.

American Charles Duelfer, deputy head of the UN Special Commission (UNSCOM) disarming Iraq under the Gulf war ceasefire resolutions, spent five days in Iraq preparing a visit there this week by his boss Rolf Ekeus.

Ekeus is due to arrive in Baghdad on Tuesday to discuss monitoring, but has said he is unlikely to recommend a lifting of sanctions before the end of the year.

Paper Says Chemical Shipment Story Part of 'Conspiracy'

JN3101154994 Baghdad INA in English 1350 GMT
31 Jan 94

[Text] Baghdad, Jan 31 (INA)—Another chapter of U.S.-led conspiracy has opened with the allegations that German and Saudi inspectors have found two containers loaded with hundreds of tons of chemicals on board a freighter at Jeddah Port in Saudi Arabia. The inspectors claim that the freighter was heading to Beirut where the chemicals were to be unloaded and transported to Iraq which will use the stuff in making missiles, says THE BAGHDAD OBSERVER editorial.

The news spread as quickly as possible and the Western as well as the American media flexed their muscles in manipulating the allegations to serve their masters' interests. The above-mentioned media quoted a German official as saying

that German intelligence has obtained the information of the freighter from their Saudi counterpart.

Those who have fabricated this story are themselves the same enemy of Iraq. They themselves were behind the imposition of sanctions against the Iraqis and they themselves were parties to the U.S.-led aggression which destroyed Iraq's infrastructure and killed thousands of innocent Iraqi people. Hence what they claim comes as no surprise to the Iraqis who are well-aware of the tactics of their enemy, the editorial added.

When Iraq announced that it was ready to abide by all UN resolutions these dubious circles began to launch campaigns with the aim of putting a spoke in the wheel of Iraq [words indistinct] states to even recommend the lifting of the more than three years sanctions against a nation of 18 million people.

The daily maintained that the human rights issues was on top of U.S. agenda of conspiracy against Iraq. The U.S. and its allies Britain and France in particular released their accusation against Iraq and said that Iraq was abusing human rights in the south of the country and denying the people in the north food rations. What these circles alleged is definitely false because those people, the Iraqis, who live in the south of the country are suffering from the same sanctions imposed on Iraq by the UN under U.S. pressures. As to the people of the north, the Iraqi government sends them their food ration regularly. But the outlawed elements there, supported by the U.S. and its allies, steal the food ration of their people and sell it in the black market.

Today the U.S. and its allies have created another way to distort Iraq's reputation before the international community which is calling for an end to the blockade imposed on the Iraqis. Furthermore, the Saudi regime for its part has been showering money upon their puppets in the Western and American media to publicize such a lie, the motive of which is well-known for the Iraqis. The Saudi regime only wants to keep the embargo on Iraq to serve the interests of its allies.

Nevertheless it has become crystal clear that the U.S. and their agents including the Saudi puppets can never succeed in either undermining the morale of the Iraqis, nor can they deceive the world public opinion because the truth will soon come up and those who fabricated the allegations will be exposed by their own people, THE BAGHDAD OBSERVER concluded.

PAKISTAN

Editorial Views Future of Pressler Amendment

BK0902094494 Peshawar THE FRONTIER POST
in English 9 Feb 94 p 10

[Editorial: "The Pressler Snag"]

[Text] The Pakistan specific Pressler Amendment, ostensibly aimed at curbing Pakistan's nuclear designs, has been reincorporated in the revised draft of the Foreign Assistance Act submitted to U.S. Congress last week by the Clinton Administration. The discussion draft submitted

on 22 November 1993 had sought to repeal the amendment taking the view that all country specific amendments must be done away with. However, it was obvious, given the significance of the nuclear issue within the South Asian context, that Pressler would witness the fiercest battle between the Administration and the Congress. Senator Larry Pressler had them vowed to fight tooth and nail for the inclusion of his amendment. It appears now that he did. Analysts, both in Pakistan and abroad had built scenarios, linking Administration's attempts at shooting down the amendment as reciprocating Islamabad's tacit approval of toeing the international line on Kashmir. It was thought at the time that Washington was posturing to indicate to India its dissatisfaction with the human rights violations as also the dated Indian rhetoric of Kashmir being its atoot ang [integral part]. Ms. Robin Raphel's visit and her statements on the issue and Islamabad's decision to withdraw the resolution in the UN, condemning human rights violations by India in the valley, seemed to point to a nexus of sorts. The Administration on its part had given the general impression that Pressler had failed to advance Washington's objectives of non-proliferation, raising hopes that the amendment might be scrapped. The scenario has come apart.

While the Americans might see this development in the domestic context of a usual fight between the Administration and the Congress, the reincorporation of the amendment in the Foreign Assistance Act has different connotations for Pakistan. And this does not just include the man on the street, but virtually everyone. There may be a spate of concerned statements on Kashmir by Americans, Ms Raphel's being the latest, but it is obvious that when it comes to the crunch, it is always Pakistan that falls on hard times. The development also does not dovetail with the viewpoint of some American analysts who have been advising Washington to remain even-handed in South Asia, especially in the military sphere. Simply put it means that the conventional strength of the Pakistani defence forces should at least be kept at a level where paranoid does not set in, forcing it to rely on non-conventional options in the face of growing imbalance of conventional forces vis-a-vis India. Now with the amendment still clamped on, the squeeze continues. While the ground forces could manage to scout for alternatives the air force, hardest hit by the amendment, is growing desperate. There is the question of the delivery of 71 F-16s for which Pakistan has already paid \$658 million but which it cannot get because of the amendment. However, it has to keep paying the installments, another snag on which the two governments, according to one report, have been stumbling. While it would be optimistic to say that Islamabad could survive the amendment, even if the costs be high, the US response to the people of this country does not enhance its credibility in the eyes of most Pakistani. Given the present escalation of tension in the region on the question of Kashmir, the development could bode ill, forcing the saner element to concede ground to the hawks.

Paper Views U.S. Aid Condition, Favors Nuclear Program

BK0602130794 Rawalpindi JANG in Urdu 6 Feb 94 p 3

[Editorial: "The New U.S. Condition for Economic and Military Aid"]

[Text] The U.S. Administration has hinted that restrictions on economic and military aid to all nonnuclear states will be maintained even if the Pressler Amendment is abolished. A discussion paper addressed to congressmen said that the U.S. Government will make economic and military assistance conditional to freezing, rolling back, and eventual destruction of the nuclear program. It has been clarified to Pakistan also that freezing the nuclear program will not be enough. The program will have to be rolled back if it wants to receive the aid which is now lying in the pipeline.

Pakistan should not foster any optimism after the clear indication by the U.S. Administration because the United States is not even satisfied with our present position and it wants a total scrapping of the nuclear program. Given this situation, Pakistan is left with no alternative but to achieve self-sufficiency in arms production and to try to become a self-reliant country to get rid of economic aid and loans. The government should pay immediate attention to making basic changes in the nation's economic structure and policies so that the objective can be achieved. It should give top priority to reliance on domestic resources, checking waste, increasing national production, and especially to developing Pakistan's relations with the economic bloc of Islamic countries.

It is encouraging that Pakistani scientists and engineers have begun work on attaining the capability to design and set up nuclear power plants. It will at least help overcome the country's power crisis, thereby accelerating the pace of industrial development. Since India has already become a nuclear power, it will not be affected by the U.S. restrictions. Furthermore, the United States is also giving preferential treatment to India. Pakistan has refused to accept any unilateral U.S. restrictions.

After the U.S. Administration's latest decision, Pakistan should now depend on its own resources to meet its defense and economic requirements instead of seeking help from the United States. We can fully overcome this trial if we can master the subject of efficient planning and rely on our own resources. We should never think of renouncing the nuclear technology which we acquired with our own labor, talent, and resources because it is a matter of protecting our sovereignty and independence. Any compromise on it will be tantamount to national suicide.

Maintenance of Nuclear Deterrent Urged

BK0302141994 Rawalpindi NAWA-I-WAQT in Urdu 2 Feb 94 p 10

[Editorial: "The U.S. Offer of Effective Defense in Exchange for Nuclear Program Is Not Acceptable"]

[Text] According to press reports, a five-member delegation of the U.S. State Department's "Arms Control and Disarmament Agency" has come here to hold extensive talks with

Pakistani authorities on the nuclear nonproliferation issue. A proposal will probably be made by the U.S. side that if Pakistan abandons its nuclear program, then it will be offered a package which will include the supply of the most modern conventional weapons and steps to make the Pakistani Armed Forces more effective in the battlefield.

Pakistan's nuclear program has long been an eyesore for the United States and heavy pressure is being exerted on Pakistan so it will abandon the program. The United States, through a constitutional amendment, has suspended military and economic aid to Pakistan. The irony is that the delivery of F-16 planes, for which Pakistan already paid, also has been withheld. A notice was also issued to pay the storage charges for those planes. The United States has not only taken a number of serious steps against Pakistan to punish it for the nuclear program, but also instructed the rest of the world to strangle Pakistan. Despite having an agreement, France withheld the supply of a nuclear reactor. Last year, Japan also curtailed its aid to Pakistan. China is the only country which is unwilling to bow to U.S. pressure. The United States has made the whole world, with the exception of China, hostile toward Pakistan.

The United States is pursuing a double-standard policy on the nuclear program issue. It vehemently dislikes Pakistan's nuclear efforts. It, however, did not even say a single word about India, which already carried out a nuclear explosion in 1974. About a dozen nuclear research centers are active throughout India, and according to a report of the United States' own CIA, India possesses enriched uranium sufficient to produce 40 to 100 nuclear bombs. India's past history also proves that it has the habit of launching aggression and it has ventured into military adventure with all its neighbors. Pakistan was made the target of the Indian aggression in 1949, 1965, 1971, and 1984. And now, for the last five years, Indian forces are engaged in bloodshed and massacre in occupied Kashmir. The danger is always there that India might embark on an onslaught against Pakistan in its disgust with the Kashmir freedom movement. Indian leaders are also threatening Pakistan with a limited war.

Pakistan is left with only one option given this situation. That is to use the nuclear program as a deterrent. It is because of Pakistan's nuclear program that India dared not launch any aggression against Pakistan since 1971 despite the Siachen and Kashmir incidents. The fact is that it is not possible for Pakistan to match India in the field of conventional weapons. India not only possesses nuclear capability, it has amassed conventional weapons as well. Unlike Pakistan, the United States has not imposed any restrictions on India on the acquisition of conventional weapons, nor does India care for any pressure from the United States either. Therefore, for Pakistan, relinquishing the nuclear program is tantamount to inviting its own death, God forbid.

As far as the possible U.S. offer—that Pakistan's position in conventional weapons will be bolstered and its Army will be strengthened—is concerned, we will only say that it is difficult to trust any U.S. promise. The United States concluded a defense agreement in 1959 accepting the responsibility to defend Pakistan in the event of a communist aggression. But when India, as a protege of the Soviet

Union and with the strength of Soviet weaponry, launched a naked aggression against Pakistan in 1965, then the United States suspended defense aid to Pakistan and also stopped supplying spare parts rather than honor its commitment. When India again launched aggression against Pakistan in 1971, the United States again remained a silent spectator. Consequently, Pakistan was dismembered by India using its massive military might. India, which then entered into a defense agreement with communist Soviet Union, was openly supported by it. Pakistan's allegiance to the United States on the other hand can be gauged by the fact that it offered its territory for the U.S. U-2 spy planes, thereby angering the Soviet Union. The situation today on the part of Pakistan still remains same. According to a report, the U.S. spy planes are stationed at Chaklala air base. Obviously, these planes will spy on Pakistan itself or will pick up our friendly country China as its target. India is a friend of the United States.

The U.S. commandos have left after completing their exercises. Reports say that the U.S. naval fleet is now engaged in joint naval exercises with the Pakistani Navy. Recently, General Joseph P. Hoar, the U.S. Central Command chief, also paid a visit to Pakistan. The U.S. ambassador enjoys the status of a viceroy in Pakistan. On the other hand, the treatment given to Pakistan by the United States is evident to everyone. During the last year, the United States tried hard to declare Pakistan a terrorist state. It is now feared that the United States might divide Kashmir in a way which suits its own interests. Pakistan is sometimes accused of being a fundamentalist or religiously fanatic state.

Given this situation, under no circumstances can Pakistan trust the U.S. promises. We do not know why our government leaders want to hold talks on acquiring a U.S. defense umbrella in exchange for abandoning the nuclear program. The United States did not help Pakistan when it needed it. How can we expect that it will help in the future? U.S. support for the Afghan mujahedin or Pakistan during the Afghan war was due to its own interests. The proof is that as soon as the Soviet Union disintegrated, the United States turned its eyes from the Afghan mujahedin and Pakistan. Afghanistan is still reeling under bloodshed and Pakistan's difficulties are still the same as before. Pakistan should clearly say "no" to the U.S. delegation and accept no U.S. offer at the cost of abandoning the nuclear program. The United States should also understand Pakistan's compulsions in the region and impose no condition which makes Pakistan vulnerable to Indian aggression. Pakistan should have the right to defend its independence and sovereignty and it is not possible without the nuclear deterrent.

Article Views Country's Nuclear Option

BK1002123294 Islamabad THE NEWS in English
10 Feb 94 p 7

[By Munir Ahmad Khan]

[Text] It is widely assumed that Pakistan has achieved nuclear capability and can exercise the nuclear option if and when in the future a political decision is made in this regard. This capability has been earned at great technical economic and political cost. As time passes, Pakistan will be subjected

to even stronger pressures to compromise on the nuclear issue and roll back or even abandon its nuclear programme. National interest demands that we retain our nuclear option as long as India does as it may take India a considerable time before it agrees to subscribe to the Non-Proliferation Regime for South Asia as has been proposed by Pakistan. During this period Pakistan has to maintain its nuclear capability. The question is now can we sustain our nuclear option.

Realistically speaking, pressures on Pakistan will mount and not decrease with time. The US commitment to non-proliferation is toughening and not receding. World public opinion is turning against nuclear weapons even in the hands of nuclear powers and certainly more and more against the so-called near-nuclear weapons states such as India, Pakistan and Israel. There is hardly any difference of views among the nuclear-haves that further proliferation has to be contained. So we will have very few or no allies to back us up. We may even be on our own.

The assumption that once a country acquires nuclear capability it cannot be eroded or taken away is rather naive and an illusion. While it takes considerable technical skill and political determination to achieve this, in the first place it needs even greater effort to retain it later on. France was a nuclear rebel until the 1980s but the changed international situation and pressures from its partners in Europe and across the Atlantic compelled it to conform to the NPT [Nonproliferation Treaty]. South Africa was able to build a small nuclear arsenal by defying international embargoes over a long time, but found it politically impossible to hold on to it and had to surrender 8 or 10 nuclear bombs it had built. Ukraine, with its 1,600 nuclear warheads, ranks as the third nuclear power in the world and has sophisticated long-range missiles to deliver them to any part of the world. Yet it cannot even service this arsenal. Its economic and security compulsions have forced it to give up this formidable capability. Even the UK finds it harder and harder to hold on to its modest stockpile of nuclear weapons in spite of its imperial longings.

It appears that it is relatively less difficult to climb the nuclear ladder but much harder to hang on after getting there. We should not underestimate the challenges we will face in sustaining our nuclear option and must prepare ourselves to do all that it takes to keep it.

While it will become increasingly hard for us to retain our nuclear option it is relatively easy to lose it. The quickest way to do this would be to increase our nuclear rhetoric to win greater public applause at home. This nuclear jingoism which our politicians and technologists have engaged in to win cheap popularity has been extremely costly to the nation. It has sent completely wrong signals abroad and played into the hands of our opponents. It also provides a ready excuse to India to continue with its massive nuclear programme. It is, therefore very important that both the government and the opposition and all responsible leaders of various parties exercise restraint when talking about the nuclear issue. This is needed particularly at a time when the US Congress has started debating a revision of the Foreign Assistance Act which could hopefully dilute the Pressler

Amendment and provide an opening for the US President to resume US Pakistan cooperation in the economic and defence fields.

Even if the Pressler Amendment is somehow miraculously withdrawn or circumvented it will only be a temporary relief. The nuclear issue between the US and Pakistan will not be resolved as the US will continue to pursue its objectives through other means. India will persist in strengthening its nuclear muscle and reach posing a growing threat to our securing. The stakes will get higher and higher. The strategy we should develop must be one which enables us to keep the nuclear option open for a long time. This means we should take immediate steps to reduce our vulnerability to outside pressures and build up the strength and stamina to resist coercion.

Politically we need a renewed commitment to our nuclear programme and to maintain the nuclear consensus. The Government and Opposition have to speak with one voice so that there is no rollback and no unilateral compromise. This demands a measure of political maturity on all sides. We have to take the nuclear issue out of the political areas so that it is above petty politics.

Economically, Pakistan is extremely vulnerable. Our dependence on foreign economic and financial aid has to be reduced. We have to put our economic house in order. This requires making tough and unpopular economic decisions which is not an easy matter for any political government. But we can not expect the aid donors to underpin our economy so that we enjoy the luxury of wasting funds at home and continue to postpone economic reforms. Without a strong economy no country can ever maintain a nuclear option.

In the defence field, we are highly dependent on foreign military supplies equipment and hardware. India meets 80 per cent of its defence needs through indigenous production while we are critically dependent on imports. We have to build our own defence industry. It will require a bold new approach to mobilise our internal technical and human resources, involve the private enterprise and establish the essential infrastructure for our defence industry which we have neglected so far.

All weapon systems, including nuclear devices, lose their effectiveness over time. New technological advances render them obsolete. Defence preparedness is not static. It has to be renewed and upgraded year after year. This needs both local R&D and access to new and emerging technologies. Unfortunately, our technological base is very small and is, in fact, not growing. We do not have the skilled manpower systems and replace the imported ones whose cost is increasing and the political price becoming prohibitive. Getting dual-purposed and sensitive technology from abroad is getting more complicated. Over the last 15 years. We have lost access to R&D [Research and Development] laboratories and hightech establishments abroad where Pakistanis are not admitted. Some people at home have made wild claims about our attainments and raised doubts about our intentions which have served to close doors on our students studying abroad. We may well have lost two

precious decades in updating our knowledge and getting into the main stream of the latest technology because we could not resist the talking too much and raising slogans of technological defiance when we have yet yet to develop a sound technological and scientific infrastructure. Time has come for us to get sober and get down to work.

In the early years of our nuclear programme speed (or apparent speed) was of paramount importance. Like others we indulged in ad hocism and ignored the rules of the nuclear game; and we are paying for it. The others learnt from their mistakes and quickly set up institutions to tighten control over all aspects of nuclear activities and developed well considered policies. We are persisting in our old random ways which expose us to greater political, financial and technical risks. Instead, we should benefit from the experience of others and quickly develop and institute our own Control and Command System so that the nuclear capability we are supposed to have remains at the command of the State and not at the whims of the individuals who as politicians, technologists and policy makers, may use them for their own ends. We have to send a convincing message to the world at large that we, too, are capable of accepting and exercising nuclear discipline and possess the maturity to control what we have with as much responsibility and restraint as others.

A country should have well-defined nuclear objectives which should be pursued through a flexible nuclear policy which takes into account the fast moving dynamics of the evolving world scene. Even the superpowers have responded to changing circumstances by adapting themselves rather than remaining rigid. We should know what we want in the long run and achieve it through our ability to negotiate with others without surrendering our principles. Nuclear weapons are losing their legitimacy as weapons for warfare but they are useful as deterrents and as instruments of negotiation to attain security goals. Pakistan has to find a way to convince Washington that the country specific amendment against Pakistan is indeed counter-productive, and that US and Pakistan interests require that Pakistan is not forced to give up the nuclear unilaterally but only in a regional framework of security and non-proliferation.

In brief, our continued retention of the nuclear option over a long period will need much greater skill and acumen than we are used to. We have to mature a nuclear consensus at home so that the political will remains undiminished and people make the sacrifices which are called for. We have to strengthen our economy, modernise and broaden our scientific and technological base, strengthen our conventional defence and industrial capability, refine our control and command system, clarify our nuclear goals and policies, restrict our rhetoric and improve our nuclear diplomacy. We have to build up our internal strength and stamina to retain what we have and build on it further to meet the inevitable challenges ahead.

Country To Manufacture Nuclear Power Reactors 'Soon'

BK1901131394 Islamabad THE NEWS in English
19 Jan 94 p 11

[Text] Islamabad—Pakistan will be able to manufacture its own nuclear power reactors sooner than later.

This was disclosed by the chairman Pakistan Atomic Energy Commission (PAEC), Dr. Ishfaq Ahmad, while speaking at a discussion on Pakistan Television Monday evening.

Former chairman of the commission, Munir Ahmed Khan, was the other participant, while Farhatullah Babar, press secretary to prime minister, was the moderator.

"In fact, a successful experiment in this regard had already been made," informed Dr. Ishfaq.

He reiterated the government's resolve to continue its peaceful nuclear programme.

"It is an issue on which there is complete national consensus," Dr. Ishfaq Ahmed said. He was of the view that in the wake of scarce energy resources, it was an imperative for Pakistan to concentrate on its peaceful nuclear programme.

"Pakistan's nuclear programme was totally peaceful and its sole objective was the social uplift of the people," remarked Dr. Ishfaq.

Pakistan, fortunately, had a number of highly professional and qualified scientists, who were busy undertaking research work in a variety of fields relating to nuclear science, said the chairman PAEC.

"Research and development (R&D) programme, which is working for past 25 years, had been further strengthened, and Pinstech was leading the programme," told Dr. Ishfaq.

He also informed that at the Kanupp, scientists have prepared spare-parts and a full-fledged computer programme, which speaks volumes of their capability in the field.

Dr. Ishfaq Ahmed told the viewers that the 300-megawatt Chashma nuclear power plant, being setup with the assistance of China, will be operative within the next two years.

The usage of nuclear technology in agriculture, industry, and health sectors was also dilated upon by Dr Ishfaq who told that, so far, 180,000 patients had benefited from the techniques introduced at centres where nuclear technology was being used.

Munir Ahmed Khan, former chairman of the PAEC, said in the wake of atomic blast by India in 1974, Pakistan intensified his efforts to expand its nuclear capability. Initially, he recalled, the emphasis was on increasing our scientific manpower, which stood at 300 then, and to provide them the latest scientific education.

"Unfortunately, all the advanced countries stopped fulfilling their commitments to Pakistan in the aftermath of atomic blast by India," observed Munir Ahmed Khan.

In this context, he referred to the Pak-French agreement for reprocessing plant and stoppage of spare-parts for Kanupp by Canada.

Consequently, he said, centres of nuclear studies were set up.

"That was the period when the Pakistan scientists were compelled to depend on self-reliance which has paid dividends over the years," reflected the former chairman PAEC. He termed the commission as one of the best institutions and a centre of excellence in the muslim world.

Farhatullah Babar said that the government of Benazir Bhutto was determined to pursue peaceful nuclear programme to meet the energy shortage that the country was facing.

He referred to the recent visit to PAEC by the prime minister. In her address to the council's annual meeting, told the moderator, the prime minister had categorically stated that her Islamic, awami and democratic government was determined to fulfil the dream of late Z. A. Bhutto who, with the cooperation of the United States, had laid the foundation of Pinstech and other scientific organizations.

PAEC Sets Up Nuclear Power Institute

BK2001114394 Karachi DAWN in English 20 Jan 94 p 1

[Text] Jan 19—The Pakistan Atomic Energy Commission [PAEC] has established an institute for nuclear power to develop conceptual and detailed design and analysis of the nuclear steam supply systems (NSSS) adopted for indigenous design and construction as well as for analyses and experimentation for safety evaluation of nuclear power plants.

Based at the Pakistan Institute of Nuclear Science and Technology (PINSTECH), Nilore, the Institute would also study, review and document work relating to nuclear power plants being carried out at the PAEC establishments and create a nucleus of available expertise.

The Institute would also advise on re-orientation of research and development work in the light of an on going critical techno-economic evaluation of NPP [nuclear power plant] concepts and latest advances in design engineering and safety enhancement.

RUSSIA

Missile Deactivation Progress Reported

PM0302111194 Moscow Ostankino Television First Channel Network in Russian 0700 GMT 30 Jan 94

[From the "Test Range" program: Exclusive report over video entitled "When Missiles Are Dying..." detailing missile deactivation process, attributed in the credits to "Radar" Studio and Ministry of Defense Central Television and Radio Studio, August-December 1993; figures in brackets denote broadcast time in GMT in hours, minutes, and seconds]

[Excerpts] [070731 thru 070813—introductory passage omitted]

[070814] [Correspondent over video captioned "Radar-TV" showing missile transporters on the move] The strategic arms reduction treaties concluded between the United States and Russia and known as START I and START II have, apart from verbal support, evoked no steps in response from the other members of the nuclear club. START II is yet to be ratified by Russia. Meanwhile the latter's missiles, including the heavy SS-18, continue to be removed from operational sites. This work was at its height during the summer and fall of last year. As in the past, missile men and defense experts displayed prompt and coordinated action at all the stages of the reduction process right up to the removal of missiles from silos and the draining off of missile fuel components. On the one hand, they were working under pressure of a tight schedule since every missile had to be removed from alert duty on strictly preset days and hours, while on the other hand they had to ensure that all the operations were carried out without any dangerous pollution of the environment ensuing.

[070908] [video shows missile being removed from silo, personnel donning gas masks, fuel being siphoned off]

[070909 thru 071021] [passage omitted on interview with engineer who says that ecological safety is guaranteed thanks to a closed-circuit system which prevents contact between fuel components and atmosphere]

[071022] [Correspondent over aerial view of missile test range captioned "Radar-TV, VoenTV"] Our industry cannot do something that it was never equipped to do, in other words to salvage simultaneously up to 2,000 ICBM's, hundreds of thousands of tonnes of special fluids and nuclear and chemical munitions. What is more, we lack the necessary resources.

This also applies to cleaning up the Russian Missile Forces' sole test range which covers an area of 175,000 hectares. During test launches certain parts of the delivery vehicle separate. They contain toxic rocket fuel residue. All this does not burn up in the atmosphere but falls to the ground and into water reservoirs. Two years ago the leadership of the Missile Forces together with ("Transres"), a special science and production center, tried for the first time to carry out a mass cleanup of the test range, using their own

resources. More than 2,000 tonnes of delivery vehicle debris was collected, but only a small part of the test range was cleared.

By agreeing to sweeping reductions of the most powerful and technically most sophisticated missiles, Russia has not only forfeited its status as an influential partner in resolving strategic issues, but it also finds itself in a most disadvantageous position in terms of the need to observe all the necessary ecological and environmental protection safeguards during the elimination of the stockpiled weapons.

[071142] [video shows aerial view of missile test range, test launch, computer graphics, debris littering the test range]

[071143 thru 071230—passage omitted on officer describing operations to clean up 16,000 tonnes of debris accumulated at the test range]

[071231] [Correspondent over video of operation to remove nose section from silo, captioned "RADAR TV"] Today Russia is reaping the fruits of the most critical period of its military policy when, as a result of cuts in military production, it was forced to extend the guaranteed period of service of nuclear missiles on alert duty. Consequently, the safe service life of 30 percent of these missiles has already expired. And another 30 percent will turn into a potential nuclear threat in two years' time. Russia is faced with the task of scrapping more than 20,000 nuclear munitions by the year 2000. And since the pace of the salvage process is very slow, we may again fall hostages to the nuclear threat, but this time because of being incapable of carrying out mass industrial salvaging of such a vast quantity of nuclear charges.

[071315] The radiation background at the launch site is only just above the permissible limit [video shows counter reading]. Furthermore, all the operations are controlled by several specialists simultaneously. Therefore the removal of the nose section at the launch site is by no means the most dangerous operation.

[071331] [video shows operations above ground and detailed view of interior of missile silo]

[071332 thru 071405—passage omitted showing officer issuing instructions on safety precautions during nose section removal]

[071406 thru 071514—video shows nose section removal operation over largely unintelligible exchanges between officers]

[071515 thru 071603—passage omitted showing Aleksandr Gribov, unit commander, to camera, on safety of handling and dispatch of nose sections]

[071604] [Unit Commander A. Gribov, identified by caption earlier, over video of site being guarded by a soldier, sign reading "Mines," nose section being loaded onto truck] It has to be said that this is by no means the least important or worst of our weapons. Fortunately, it has never been used in practice. But the tests that were carried out showed that both the missile and the warheads are excellent and highly effective.

[071648] [video shows soldier guarding site, nose section being loaded onto a truck, partly over sinister music]

[071649] [Correspondent over closeup of nose section being loaded onto truck] The nuclear nose cone of the SS-18 missile can carry 10 nuclear warheads. At the moment there is nothing to compare with it in the world.

This unusual cargo will be carried in this neat truck only as far as the nearest depot. Before entering the industrial salvaging process, it has a difficult journey along worn-out Russian roads ahead.

[071713] [video shows warhead being loaded, truck on the move]

[071714 thru 071741—passage omitted showing Aleksandr Volkov, first deputy commander in chief of Strategic Missile Forces, to camera, on safety regulations governing handling and storage of nuclear munitions]

[071742] [Aleksandr Volkov, first deputy commander in chief of Strategic Missiles Forces, identified by caption earlier, over video of missiles on railroad platforms in a siding in snowy location] We have established two bases for scrapping missiles, the Surovatikha base, and Pibanshur near the city of Izhevsk.

[071805] [video shows missiles in railroad siding, concrete building in the middle distance, closeups of missiles on railroad platforms, partly over sinister music]

[071806] [Correspondent over video of missiles being dismantled in large hangar] Pibanshur and Surovatikha are Russia's first bases for scrapping ICBM's using resource-saving technologies. Following the removal of the dangerous fuel components, each SS-17 and SS-18 missile will be carefully dismantled. In this way the Surovatikha base will be able to scrap more than 40 heavy missiles a year. This means that thousands of tonnes of expensive metals and alloys will be returned to industry.

As is known, the previous class of missiles—intermediate- and shorter-range missiles—were scrapped by means of explosions. To the general amazement of our compatriots, billions of rubles were turned into ashes and smoke, quite apart from the damage that was done to the environment. This is why the two new enterprises—which, incidentally, have been set up by the missile forces themselves within their department—unquestionably mark a long-overdue step toward savings of state resources spent on disarmament.

For the time being inadequate funding is hampering the entire federal program for recycling ecologically dangerous materials from scrapped weapons. The Surovatikha base could make up this shortage of funds through the sale of part of the salvaged materials to other enterprises for processing. But the latter do not have any money either.

While a search for coordinated action by the ministries and departments interested in industrial recycling is under way at the top, the missile men have to bear the full burden of this work themselves. [072009] [video shows detailed views of salvage operation with camera switching back to railroad siding at the end]

[072010 thru 072415—passage omitted on brief statements to camera by Volkov on safety regulations, START I and II provisions; video of silo being blown up with correspondent describing the economic disadvantages of this treaty obligation]

[072416] [Correspondent over video of an SS-18 on a truck, followed by computer graphics, captioned "RADAR-TV" and "VoyenTV"] To replace the multiple reentry vehicle missiles which are being scrapped, Russia is planning to build another multiple-warhead missile [mnogoblochnaya raketa] based on the SS-25. However, as distinct from the heavy SS-18 missile, the new missile cannot be guaranteed to penetrate the opponent's anti-missile defenses, since the SS-18 was capable of releasing, in addition to its 10 warheads, up to 1,000 false targets into orbit. Scientists at the Moscow Heat Technology Institute intend to make up for this forced minus-point in the design of the nose section of the new missile by making these missiles easily reequipable into the "Start" system which can be used for launches for scientific purposes either right now or in the event of arms reduction. Admittedly, the engineers and designers will have to find the money to further develop this project themselves in order to preserve the scientific potential of Russia's only institute of this kind. [072540] [video shows computer graphics demonstrating new missile, brief shot of interior of scientific institute, mockup of "Start" system]

[072541 thru 072800—passage omitted on brief interview with Boris Lagutin, general designer, talking in general terms about the quality of Russian missile design; brief outline by correspondent of tripartite agreement between Russia, United States, and Ukraine over unspecified military facilities]

Facilities for Destroying Chemical Weapons Lacking

LD0102214494 Moscow Mayak Radio Network in Russian 1930 GMT 1 Feb 94

[From the Slavyanka program of the Russian Defense Ministry]

[Excerpt] How many chemical weapons are there in Russia and are they being destroyed? A Slavyanka correspondent asked (Igor Vlasov), head of the public relations sector of the committee for (?conditional) problems about chemical and biological weapons under the Russian president. He said:

[Begin (Vlasov) recording] Russia inherited chemical weapons from the former USSR as follows: 40,000 [metric] tonnes of toxic substances, including 32,200 tonnes of organophosphoric toxic substances stored in aviation, missile, and artillery charges; and 7,700 tonnes of old skin-sensitive toxic substances dating back to World War I, that is, mustard gas, lewisite, and their mixtures. They are stored in boxes, containers, reservoirs, and so on.

Russia is not destroying chemical weapons because it has no industrial facilities for utilizing or destroying chemical weapons. [end recording] [passage omitted on announcer recalling the 1992 Paris convention on chemical weapons]

Uranium Thefts, Destination Examined

94WP0053A Moscow TRUD in Russian 29 Jan 94
Saturday Edition p 2

[Article by Aleksandr Danilkin under the rubric "Private Investigation": "From Russia with a Nuclear Welcome. Do You Want a Bomb? No Problem"]

[Text] It is a commonplace that it takes 1 kg of uranium to produce one atom bomb. It is another matter that this is only raw material. And the bomb ends up with considerably less power than, for example, the one dropped on Hiroshima. And this depends largely on the degree of enrichment of the uranium. But the fact is that it works!

And now the information obtained in the Ministry of Internal Affairs of Russia: During the past year several dozen thefts of uranium-235, uranium-238, and other radioactive substances from secret defense industry enterprises of the country have been registered. The figures for last year are being amended. In each case no less than 1 kg has been stolen, and most frequently they each take a piece weighing 4-6 kg. One more stipulation must be made here: We are speaking only about cases where the criminals were apprehended and the dangerous cargo confiscated. One could quite logically assume that we have not managed to arrest all the uranium thieves. And now attention: According to figures in the German press, as of today the FRG is investigating 150 criminal cases involving illegal trade in radioactive substances. Law enforcement organs there assume that the lion's share of these substances migrated to Germany over the vast expanses of the once inviolable Union. But even that is not all. Let us not be idealists: In spite of German meticulousness and care, there is no doubt that this is only a certain part of the whole. The ones who failed. If there were no uranium smugglers who succeeded, this business would wither on the vine. The Russian nuclear business is three years old. Previously it was simply impossible. Now it is attractive to many.

May Dreams

Last year Vladimir K. was still working in a large Moscow scientific research institute that dealt with problems of nuclear energy. On his way home from work he usually met his friend Aleksandr P., who was not employed anywhere and lived on odd-job earnings. In spite of the difference in their social positions, both of the young people were equally short of money.

When entertaining his friend, Vladimir frequently told him various stories from the institute to the effect that they practically have uranium coming out of their ears and nobody is worried about it. In his words, an equal if not a greater mess was being made in the neighboring associate enterprise, which is also secret and to which Vladimir also has access. One warm May evening the friends did not have enough money for beer and were dreaming about wealth. If there is uranium coming out of their ears, why not take advantage of an opportunity? This could be done best in the "P.O. box enterprises," at the associated enterprise.

... In the middle of May Vladimir K. managed to steal a 4 kg chunk of uranium which, although it was considered to be

only slightly enriched, still "gave off radiation." In order not to get a large dose, Vladimir wrapped what he had stolen in special foil and placed it in an ordinary cellophane package. He boarded the commuter train and went home to Dedovsk near Moscow. He had no Geiger counter, so up to this point he did not know what kind of doses the other people in the car or he himself had received.

In Dedovsk the friends buried the package of uranium in a suburban forest and started to think about to whom and, the main thing, for how much they could sell the "bomb." The task was not that simple, and it was necessary to bring four more people from that same company in on it. Through joint efforts they managed to make connections with people who knew something about prices on the black market. It turned out that they should ask no less than \$60,000 for this piece. By this time none of the six were working anywhere, the transaction promised good money, and they were already dreaming of a new life.

They began to look for a buyer. But from that moment, in the words of one of the operatives, "they began to suffer from an old affliction"—the fear of losing their wealth. They thought someone might find the package of uranium in the forest, so they dug it up and moved it to Dedovsk, where they hid it in a garage. Then they hid it again, in the garret of a residential building whose residents had no suspicion of the danger that threatened them.

Their search for a buyer lasted a half-year. In the words of the "nuclear" six, they would have sold the goods to anyone who would pay good money; they were not concerned about what happened to their product after that. It was considered axiomatic that the "bomb" would interest foreigners and therefore they looked for contacts with them. The business even reached drivers of heavy trucks from the Baltic region. But after hearing the proposals, the majority of the Baltic residents stepped on the gas, and the few who did agree to buy paid a miserly price. Ultimately the zealous activity of the six was noticed by the regional administration for fighting organized crime. Experienced operatives from the Moscow suburb Krasnogorsk watched the group for three weeks and then arrested them. A special group assigned to work with radioactive substances was called to confiscate the stolen uranium.

When the leader of the operations group spoke with the official representative of the enterprise the 4 kg of uranium had come from, he stated that "every mouse is accounted for around here." To which the Krasnogorsk militiaman responded: "Maybe a mouse cannot get by you, but 4 kg of uranium were stolen from you."

Our Country Is Large...

A militia colonel and deputy department head of the Main Administration for Economic Crimes of the Ministry of Internal Affairs of Russia, Vitaliy Zus, confirmed to the correspondent that dozens of thefts of radioactive materials are registered here in a year. Of rare earth metals—hundreds. Traffic in radioactive materials is a sign of the times. We know the explanation for this kind of trafficking: the collapse of the Union, the conversion that has been

started, economic confusion, and the liberal conditions on the borders that facilitate taking goods out.

In spite of all its cataclysms, Russia has remained a country with immense territories. With a great multitude of defense enterprises and the most diverse "P.O. Box enterprises" where radioactive elements and that same uranium are used. A demand for inexpensive radioactive substances has arisen among mysterious foreign consumers. But the conditions at the secret enterprises have remained the same. A worker of that same department of the Main Administration for Economic Crimes, militia Colonel Sergey Mayorov, noted that about 90 percent of the thefts of strategic raw material can be explained by the possibility of free access, including for people from the outside. And also there are all kinds of violations of rules for accounting for and storing raw material.

The stolen uranium and other radioactive substances are usually offered to foreigners or intermediaries who are able to travel abroad. Of course it is easiest to meet such people in large cities, in Moscow. Most frequently it is there, to its white stones, that the uranium trail extends. Where does it come from? From everywhere where there are defense "P.O. Box enterprises." And they are everywhere: Siberia, the Urals, Central Russia...but the Urals still take first prize in this matter. They are a real Klondike for "nuclear" thieves.

From existing data it is possible to compile a portrait of businessmen of this breed. Judging from the practice and thefts of radioactive substances, they work, as a rule, in groups, and not alone (people working alone are caught more easily). The group usually includes (along with "proletarians") middle-level technical managers and also some representatives of the leadership of the enterprise—in case they have to provide a cover at a dangerous moment or simply "not notice." Or put their signature on a document for writing materials off. Then the courier takes the commodity in a capsule to the capital, where the buyer is given the opportunity to take 1 gram of the substance for analysis. If the commodity meets his "standard"—the transaction is completed according to the classical formula of "commodity-dollars." One well-informed person told a correspondent that if the buyer thinks of violating the gentleman's agreement, he is punished by death. This person even confirmed that the ones trapped by the militia, as a rule, are "people working on their own or terrible dilettantes."

Reality convinces us that what he said is true. A department chief of the Economic Crimes Administration of the Moscow City Internal Affairs Administration, Boris Blontsev, told about one such case. In a closed compound in Chelyabinsk Oblast 4.5 kg of a substance containing uranium-235 was stolen from a defense enterprise. The thief managed to successfully cover his tracks and soon he was on his way to Moscow with his mysterious parcel. The lone thief had no idea of whom to offer his parcel to or how many thousands of dollars to ask for it. Ultimately he ended up in a meeting with a buyer who turned out to be...a militia worker. Workers of law enforcement organs think that the single person from Chelyabinsk had practically no chance of succeeding.

Seize the Moment!

While preparing this article I had occasion several times to see various consultants. All of them agreed with the opinion that a dangerous time had come and it is becoming advantageous and almost safe to engage in trade in semimanufactured nuclear products.

Quite recently a tonne of titanium could be purchased in Russia for 350 rubles [R] and then shipped abroad, where one could obtain \$7,500 for it and buy household electronic equipment there, and then take it home and sell it for a fantastic profit. More than one Russian has become a billionaire from such speculations...prices of rare metals in Russia are now approaching world prices, and buying and selling them can produce a solid income, especially if they are shipped contraband, that is, if you do not pay for licenses, quotas, etc.

Not long ago investigators from Moscow confiscated seven ampules of cesium—a total of 1,550 g. When they brought it to an academician for consultation he was amazed: Never before in his life had he seen all at once seven ampules of cesium, 1 kg of which costs \$50,000. Half joking, the academician said that: "He had an atomic bomb lying on his desk at that time." In certain circumstances, cesium can be extremely explosive.

Specialists from law enforcement organs think that there is another, possibly the strongest, precondition for smart "nuclear dealers," and one might call this precondition this: state feebleness.

Until recently any accident involving radioactive substances came mainly under the purview of the KGB. This information was systematized, analyzed, and immediately sent up to the very top. KGB people played first fiddle in all kinds of "P.O. Box enterprises."

A couple of days ago I phoned the corresponding service of the former Ministry of Security and asked for information on the countries to which stolen radioactive substances go from Russia. A day later the official representative reported: The Department has no information on this subject. That is, it does not know. One can perhaps believe this answer too: The Department has not had time for this recently.

I received a similar answer from the Russian customs service: "It seems that there are such cases, but they are individual and are no big deal." Most likely this answer can be accepted as well. But when you recall the endless Russian borders which are now called penetrable...the customs service is up to its neck in work and there is simply no possibility of keeping track of many regions.

In circles close to the government one most frequently encounters this position: "The problem of the sale of stolen semimanufactured products for an atomic bomb abroad is fabricated, we know nothing about this." And could it be that the militiamen who encountered criminals of this kind were really just exaggerating because they were afraid? And who would let it enter their mind to risk their health in this way even for dollars?

According to information from the Ministry of Justice of Russia, articles concerning the theft and attempts to sell radioactive materials were introduced into the Criminal Code back in 1988. But during 1988 and 1989 not one person in Russia was convicted under these articles. In 1990 one was convicted. Then for two years in a row there was silence, and in the first half of 1993—there were 12 individuals. We have no figures for the second half of the year yet.

We managed to obtain this information from unofficial but reliable sources: When investigating criminal cases involving the theft of radioactive substances they manage to arrest only every tenth criminal. And this certainly does not mean that his case is necessarily taken to court. As a rule, they use a multitude of intermediaries and also couriers to transport the material—people who have no idea of the content of their cargo. But even if a person is caught red-handed, his first words will usually be: "I found it." Or: "I bought it from somebody I did not know." Just try to find where it all ends.

Information from the Ministry of Internal Affairs of Russia: During 11 months of last year 8,793 crimes involving all kinds of strategic raw material (including radioactive substances) were committed in the country. In spite of the numerous official appeals from law enforcement organs to the government for help and the various committees and other levels of authority, no reaction followed. Which in translation can mean: "Catch them yourselves!"

A Bomb for...

And now the main question: Where does the river of uranium flow from Russia? For now we know for certain that our compatriots do not intend to make and keep a private atom bomb. But is the final destination of these exports Europe?

From the majority of my consultants who had at least in some way been involved with the problem of uranium and similar substances I most frequently heard this address: the Near East.

According to certain information, emissaries are sent to Russia, forming the demand and prices on our uranium black market. They say that unofficial Iraq has long shown an interest in goods of this kind. Evil tongues even assert that there are chunks from the Urals in the atom bomb that they are now assembling. But officials so far do not want to either confirm or deny these assumptions.

Paradoxical as it may be, a circumstance that significantly complicates the fight against theft of radioactive raw material is the coincidence of the interests of the "uranium" criminals and those who...are responsible for the safety of

our radioactive reserves: Both are interested in remaining silent. Neither one side nor the other wishes to risk their own necks. Not until a critical mass has accumulated.

Lack of Money Said Behind Thefts, Resale of Uranium

*LD0902162494 Moscow ITAR-TASS in English
1441 GMT 9 Feb 94*

[By ITAR-TASS correspondent Vladimir Gondusov]

[Text] Moscow February 9 TASS—High prices and low wages force some Russians to go stealing... radioactive materials to resell them later for profit in order to make both ends meet.

Last year alone, there were 11 attempts to steal uranium from Russian nuclear facilities, according to Yuriy Yefimov, head of the Department for the Protection of Strategic State Facilities of the Russian Interior Ministry troops.

Speaking at a conference of the Russian Interior Ministry senior officials in Moscow on Wednesday, Yefimov said that law enforcement bodies reported about 900 attempts of illegal penetration into secret nuclear facilities in 1993. In 700 cases their employees were caught while trying to smuggle out secret documents.

Experts of the Russian Ministry of the Nuclear Power Industry tend to blame the stealings on the worsening economic situation in the country which forces people to resort to extreme measures in order to eke out their existence.

Experts claim that the thefts of radioactive materials are carried out by people who know technology as their own palms. This opinion was shared by Yefimov who said that one of the attempts to steal uranium and smuggle it out of the country was made by a group of employees of one of the secret plants near the city of Yekaterinburg, the Urals region, which included some of its top officials.

Obninsk Businessman Found To Have Uranium-235

PM0902152794 Moscow PRAVDA in Russian 9 Feb 94 p 1

[Igor Shedvigovskiy report: "Uranium 'for Export'"]

[Text] Kaluga—In our economic chaos, strategic materials are also becoming a source of profit for market businessmen. In Obninsk staffers of the organized crime administration of the Kaluga Internal Affairs Administration came across the vice president of one of those commercial firms with a fashionable foreign name and discovered that he had a container of uranium-235 in his possession. It is no secret that this product is used as fuel for nuclear reactors and thus commands a high price. A further search led to the city of Elektrostal in Moscow Oblast, where the vice president's brother was employed at an enterprise. He had 30 times more uranium in his possession than his Obninsk brother. According to one account, this valuable fuel might have been destined for the Near East or Germany.

Krasnoyarsk-26 Plutonium Now Used for Fuel, Not Weapons*PM0902121794 Moscow Ostankino Television First Channel Network in Russian 1800 GMT 4 Feb 94*

[From the "Novosti" newscast: Video report by A. Parfenenkov and Yu. Sysoyev, identified by caption]

[Text] [Parfenenkov over video of city street, bus] The people of Krasnoyarsk-26, a city which until now was closed to everybody except for taiga inhabitants and those sent there to work, have finally undertaken to share events close to their hearts with the outside world. The world's first nuclear heat and power station is 30 years old. To this day, it faithfully supplies heat to the homes of this beautiful city with its 100,000-strong population on the right bank of the Yenisey River. The power plant is located deep down under the rocks. The tunnels forged there are adorned in marble in many places, and they rival the St. Petersburg subway in terms of length. But let's be honest about this—it is not for the sake of a fairly modest nuclear power generator that people dug their way into the rockface....

[P.G. Gusakov, nuclear heat and electric power station chief, identified by caption] In this city most people work at the Mining and Chemical Combine, which belonged to the defense sector and the nuclear complex, and its task was to produce weapons-grade plutonium.

[Parfenenkov] Krasnoyarsk-26 still has the capacity to make a lot more of this stuff that goes into nuclear weapons, but the demand is no longer there. So what will the people of the city do? Work to alter the quality of the weapons-grade plutonium is under way. Henceforth it will be used as fuel—that same fuel which has provided heat for the last 30 years, and which will continue to keep the city in the Krasnoyarsk taiga warm into the future. [Video shows view of city, interior of power station, interviewee, control room, train exiting tunnel]

Camera Crew Visits SS-17 Missile Site*PM0402143194 Moscow Russian Television Network in Russian 1920 GMT 29 Jan 94*

[From the "Top Secret" program: Video report entitled "The Nuclear Button" by Artem Borovik, identified by caption; figures in brackets denote broadcast time in GMT in hours, minutes, and seconds]

[Excerpts] [192245 thru 192420—introductory passage omitted]

[192420] [Borovik over video of himself accompanied by two others, one in uniform, arriving at missile base] A few weeks ago our camera crew visited a Russian nuclear missile base located a few hours' traveling time from Moscow. We traveled first by train and then by military helicopter, and finally we arrived at the launch site, where an SS-17 missile with a multiple warhead is concealed in a silo. It is targeted on the Warren U.S. nuclear missile base located near the city of Cheyenne in Wyoming State—the headquarters of (Dirk Jamieson), a U.S. 3-star general who commands land-based strategic missile forces. This missile would take 30 minutes to reach Warren base.

General Gribov, commander of this Russian missile division, descended with our camera crew to his underground labyrinth, which is well protected against the consequences of a nuclear explosion. It is possible to descend even further to reach the combat control console, from which 10 missiles can be launched, one of which we have just seen. [video shows Borovik proceeding along an underground corridor. An overhead inscription reads: "Command Post of Military Unit No. 14264"] The officers on duty here spend hundreds of hours a year in these nuclear underground corridors. Every time before they come on duty they have to pass a test to demonstrate their precise knowledge of the functioning of this equipment and the sequence of all their actions. They also have to undergo thorough medical and psychiatric tests several times a year, and routine checks prior to every duty tour. The fate of our planet is in these people's hands. They are not told where their missiles are targeted. Division Commander General Gribov also prefers not to know, although he is fully entitled to this knowledge. When a launch command goes out, our missile men know exactly how to distinguish between a training command and a combat command, while U.S. officers on duty at similar consoles are not told by their commanders which is a training command and which is for real.

Such missile army divisions are scattered throughout Russia and also Ukraine, Belarus, and Kazakhstan. Invisible nerves link them to a single nuclear center which is located a 25-minute drive from the Triumphal Arch [video show arch] to the west of Moscow at a place called Vlasikha. The missile men told us that in the last century there was an estate here whose owner was popularly known as "Vlasikha." Only a few years ago these roads and traffic along them were controlled by our counterintelligence. Outsiders could not pass here without being stopped.

This whole vast nuclear mechanism of the former Soviet Union comprising many thousands of land-based missiles is under the command of Colonel General Igor Sergeyev, commander in chief of the Strategic Missile Forces. [192700] [video shows missile site, silo, underground bunkers, commander saluting departing television crew, triumphal arch, road to Vlasikha, Sergeyev being interviewed]

[192701 thru 200800—passage omitted consisting of brief biographical data of Igor Sergeyev; explanation of the differences between Russian and U.S. strategic missile forces; interview with Sergeyev interspersed with highlights of his recent visit to the United States where he was met by General Butler, hosted in the Pentagon, and shown Strategic Command facilities; comments by Doctor of Historical Sciences Aleksey Arbatov, resident expert of "Top Secret" program; reception poor to worthless toward end]

Scientist Claims Parts of Russia Affected by 'Agent Orange'*LD2801184494 Moscow INTERFAX in English 1701 GMT 28 Jan 94*

[Text] Thousands of Russians live in localities affected by a U.S.-style Agent Orange chemical tested there in the 1960's and 1970's, president of the pressure group for chemical security Lev Fedorov told Interfax.

He is the co-author of a 1992 newspaper article together with chemical scientist Vil Mirzayanov on Russia's development of binary weapons leading to the latter's arrest on charges of divulging a state secret.

Fedorov who is one of the witnesses in a closed trial in Moscow, says that there is still a shroud of secrecy not only about new generation weapons but also obsolete toxic agents which are no longer produced or have been destroyed either in part or in full.

Thousands of tons of the Agent Orange type chemical weapons were produced at a chemical plant in Ufa between 1965 and the late 1970's, Fedorov said.

He spoke of having evidence that the weapons were tested in the Primorskiy, Krasnoyarsk and Krasnodar regions and in the northern Caucasus. These must have been sprayed but the government is still reluctant to declassify the secret information, Fedorov said.

In his words, decomposition of the weapons leads to the formation of dioxins, a substance that is hazardous to human health.

Uranium Mining Declassification Applauded

94WP0062A Moscow LITERATURNAYA GAZETA
in Russian No 5, 2 Feb 94 p 13

[Article by Abram Blokh, doctor of geological and mineralogical sciences: "The Secret of the Kodar Sobakita"]

[Text] The secrecy classification has been removed from information about the search for and extraction of uranium. Anyone who has worked for decades in this mysterious field feels, together with relief and a feeling of bitterness, that too many years have been spent in a routine of prohibitions and inflexible restrictions.

I will not undertake to judge the advisability of the decisions made a half century ago—the all-embracing classification of that vast body of human and physical resources which was put into effect at the dawn of the atomic problem. I know only that not one of the countries outside the socialist camp has taken such a step. We must think that we are not the last ones for purely economic reasons, in order to avoid the huge unproductive expenditures, to maintain an army of protectors and the inevitable informers in secret matters. All the same, the leak of information is already substantial when there are two who bring it instead of one, unless they are truly isolated from the outside world, of course. But hundreds of thousands, if not millions of people, have been counted here.

In 1954, when a program of searches for uranium was undertaken on a wide scale, a geological technician with a radiation meter joined our coal geological exploration party in Ryazan Oblast. And in the core sample of one of the boreholes selected for measurement, in a plain layer of clay on the side of the coal-bearing area, a high concentration of uranium was suddenly discovered. Soon after, controlled drilling was begun under conditions of strict secrecy. The trust employees stood watch at the drills and collected and documented the cores, and we just provided the drilling process. To the puzzled questions why we were drilling

where there is obviously no coal and in a system that was unprecedentedly dense, the response was for the needs of the trust, "but I do not know what kind." While the slyly smiling drilling foreman once revealed that his mother had brought home a tale from the market that geologists had found an "atom" under the village of Zheltukhino.

How can we help but remember the immortal adage, over 200 years old, uttered by the observant Madam de (Stal) after a trip to our country: "In Russia everything is a mystery and nothing is a secret." The instructional song of the miner leaving for a health resort could also have been included in the Vysotskiy repertoire by the head of the first division of the uranium mine. Quiet Yakov Davidovich Gotman, an honored figure in science and technology, one of the pioneers of Soviet uranium geology and discoverer of the unique Aldan uranium mining area in southern Yakutia, has recounted the absolutely fantastic story about the information leak. In the late 1940's, he was sent along with S. Yershov, the deputy minister of geology, and his colleague B. Petrushevskiy, to Central Asia on assignment. On the next day, the "Voice of America" reported the departure of three specialists from Moscow for the Central Asian uranium deposits.

After the country acquired its atomic and thermonuclear weapons, through the selfless labor of its specialists and with a little help from the prospectors who were just as selfless, and was able to stockpile enough of them to annihilate all life on the planet, secrecy in the geology of atomic raw material was turned into an indisputable absurdity. But the screws were tightened even more.

In the first decades of the uranium boom a researcher working in the atomic energy field could publish scientific works which did not deal with uranium with all the publication data, including the name of the organization in which he was working. But if reference was made to articles on uranium geology, mention of the subject of one's research and its geographical location, as well as one's place of work, was prohibited. The routine of a scientific institution was also considered a big state secret, and Anatoliy Shcheranskiy, as we know, paid with a 13-year sentence in the camps at the end of the Brezhnev era for allegedly divulging such information.

From the mid-1970's, after achieving parity with the United States, the ban on indicating one's place of work was extended to all scientists who were working with uranium. Even if the author of a completely harmless article did not mention uranium in previously published works. Even when secrets which they endeavored to safeguard were lost because of circumstances, this did not stop those in control of universal secrecy. After the Prague spring was smothered, the head of uranium geology in Czechoslovakia, Vladimir Ruzhechka, did not return home. In a book published in Canada in the mid-1970's, he revealed the uranium resources not only of Eastern Europe, but the Soviet Union as well. But like a mosquito which continues sucking blood by inertia when its belly has been cut off, so the illuminated skyscraper of domestic secrecy has continued to increase the number of its stories.

The closed nature of the sector was convenient for the uranium barons to a large extent, making it easier to pump huge budget appropriations into it. The overexploration of deposits, linked chiefly with the faulty planning system, which is inconceivable in other countries, is typical for Soviet geology as a classic cost-based branch of the economy of socialism. Wages and bonuses depended not on specific results, but the running meters of drilling, the cubic meters penetrated, and so forth. Thus the effectiveness of geological exploration operations turned out to be less advantageous for collectives than increasing their volumes.

It is unlikely that the almost unknown venture involving the mobilization of vast sums and numbers of people in completely unprepared searches for uranium in the Kodar Range in northeastern Chita Oblast would have been possible without absolute secrecy. Based only on a highly radioactive piece of rock with absolutely no geographical connection (such specimens are called "sobakity" in geological terminology) which was sent to Moscow, they quickly sent out two camps of prisoners into the unpopulated high mountains under severe conditions in the late 1940's, and urgently put together a specialized geological exploration expedition and a second expedition to conduct scientific support for the operations, organized from scientific associates of the Leningrad Geological Institute, who were to remain at the site the year round. At the same time, they shipped out heavy equipment and began drilling, tunneling, and so forth in an area that had been given absolutely no geological study. In the wilderness of the mountainous taiga, out of touch with communications, the prisoners immediately began erecting the buildings of a new town. The materials needed were taken in by a winter road, and by aircraft the remainder of the year. The results turned out to be poor—at the cost of much effort and many lives, they found only a number of small signs of ore, unsuitable for industrial exploitation.

The army of specialists who provided their intellect and hard labor and often lost their health to develop the country's uranium base were the victims of this secrecy. They were prohibited from traveling abroad, even to "fraternal countries," and from contacts and correspondence with foreign colleagues, which scientists need like a person needs air. Without convincing explanations, authorization to participate in international conferences could be refused, even when they took place in the USSR, and even when personally invited with a paper which did not lead to complaints.

When my article on important aspects of the theory of ore formation, whose conclusions were based on Ilya Prigogin's assumptions about the lack of equilibrium in thermodynamics, appeared in one of the scientific journals, I decided to send a reprint to the Nobel laureate and soon after received a warm letter from him, a copy of his last monograph, and an invitation to visit him at the institute in Brussels.

Dreams about a trip were obviously illusory at that time. But it would really be up-to-date for an outstanding scientist of modern times to publish support for his scientific ideas. It was during those very years of exhausting opposition from the powerful (not in number, but opportunities) group of

scientific opponents headed by V. A. Zharikov, the current academician-secretary of the RAN [Russian Academy of Sciences], who was no less omnipotent then as the chairman of the VAK [Higher Degree Commission] and who successfully blocked my certification for the doctor of sciences degree for almost 20 years.

Nevertheless, I preferred to remain silent, for the fact that I had exchanged letters with a foreign scientist could have been harmful.

The restrictions on movement and contacts were imposed on participants in the American atomic project as well. But unlike our bureaucracy, these restrictions were extended equally to everyone, from Robert Oppenheimer, the head of the project, to the ordinary technician. But our uranium "generals," who possessed incomparably greater information under the "secret" classification, very calmly traveled throughout the world. The wives of the high officials working in the uranium field also had the same privileges.

The Americans were generously compensated with additional payments for the inconveniences related to the restrictions. Additional payment "for secrecy" was also stipulated for Soviet uranium employees by some ancient classified government decrees. But in accordance with the classical laws of the Kingdom of Distorting Mirrors, the payments were received by the directors, their deputies, chief accountants, and employees of the first divisions, that is, the ones who forgot long ago how to hold a geologist's hammer—or never did know how, or how to walk the hills and dales with a radiation meter and through mine workings, or to study the radioactive rocks under a microscope.

The farfetched secrecy, in accordance with the laws of feedback, has hit the system which gave rise to it as well. There is a wide conviction that the criminals sentenced to death are not shot but sent to the uranium mines, where they soon die. This is all a fantasy. Throughout my working life I have spent innumerable shifts underground not only in uranium mines, but coal, cobalt, molybdenum, and gold workings as well. I am prepared to attest to the fact that I never encountered more comfortable conditions than in uranium mines. A well organized and strictly controlled ventilation system that provides for work safety, workings at one's full height, not manholes for "abdominal movement," and a large number of showers on the surface, maintained in model sanitary condition...

Of course, the all-powerful Minsredmash [Ministry of Medium Machine Building] was not ashamed to make use of the convicts' forced labor on a wide scale. But just in construction and auxiliary operations. The prisoners were not underground. They were not needed there, and the uranium mines did not experience a shortage of a mining work force. Many were attracted there by the exemplary work conditions, the higher earnings, and the well-equipped housing with which the ministry's towns and settlements were always provided. In addition, the radioactivity of even the rich natural ores is incomparable with the enriched uranium from the reactors of nuclear power stations, the deadly radiation which is erroneously attributed to the mines. If one is looking for places suitable for prisoners

condemned to death, one should look in the coal mines, with their unacceptably low level of safety equipment.

But what comes with the declassification of uranium, aside from a belated quiet satisfaction? Its features as a more "cosmopolitan" environment than other ores help to "get into" the general natural laws of ore formation. So the tens of thousands of volumes of handwritten reports by Soviet uranium workers with the most extensive information, which continue to remain behind the steel doors of the geological funds, are truly the property of world science. The titanic intellectual labor of several generations of specialists, which is capable of standing up to the competition in any market of scientific knowledge, is concentrated in them. The only question is whether we are really able to enter these steel doors.

UKRAINE

Kravchuk Secures Victory at Disarmament Debate

PM0702170394 Moscow KOMSOMOLSKAYA
PRAVDA in Russian 5 Feb 94 p 2

[Olga Musafirova report: "May We Join?.. The Ukrainian Parliament Will No Longer Stymie the Nuclear Disarmament of the State"]

[Text] Kiev—It was simply a crushing victory for Leonid Kravchuk. Once again he mixed his supporters and opponents together in the Supreme Council to produce new political loaves in the way that a good housewife kneads dough. Leonid Makarovych listened carefully first to the microphone on the left which promised him the Nobel Peace Prize and then to the microphone on the right which threatened him with Article 56 of the Criminal Code for treason on a specially large scale. And all this for a three-page statement by the presidents of Ukraine, the United States, and Russia delivered in Moscow on 14 January.

Meanwhile the stove had been lit and the loaves knew that they would have to leap into it. Ukraine's nuclear weapons are—thanks to the economic policy of the last two years—the only commodity which the West has dreamed of buying here, buying in order to destroy them.

However, the Supreme Council was required not to sign but, on the contrary, to erase something, to strike out its so-called "warnings" over an article in Protocol Five of the START Treaty as enshrined by decree in November 1993 so that the document was not at odds with the three-page statement of the presidents which had already been agreed upon.

The situation was lent special piquancy by the fact that the "Moscow pact"—neither the statement itself nor the appendices to it containing specific figures and deadlines for Ukraine's nuclear disarmament—did not need ratification at all. And the debates in parliament guaranteed their participants profound moral satisfaction only.

Leonid Makarovych bore the blows of fate in worthy fashion. He forgave his attackers: "I understand it is a difficult decision for you to make..." He encouraged those who thought like him: "I received a letter from Clinton at

lunchtime. He writes that he is doubling economic aid to Ukraine." True, the real issues remained off stage: The questions of interest to the technicians and professionals like Kuchma of how modern solid-fuel SS-24 missiles are going to be scrapped if the technology for recycling them does not yet exist in the world; who will solve the problem of utilizing weapons-grade plutonium; what to do with the abandoned missile silos, and so forth. A purely political rather than a comprehensive approach to nuclear disarmament can only result in either blatant deception of the whole world or upheaval within the Ukrainian state system. But the president was as good as his word: He exerted his influence and led people toward a compromise.

With just a couple of minutes to go before the end of the working day parliament was persuaded that it was being taken into account, established a quorum, and pushed the "yes" button. Unconditional ratification of START I was carried. The new decree was prepared by the president himself as a legislative initiative. True, during voting the third paragraph—on accession to the Treaty on the Nonproliferation of Nuclear Weapons of 1 July 1968—got unexpectedly dropped: Someone remembered that deputies had not actually seen the document themselves, which was inconvenient.... Therefore Ukraine has not subscribed to it, although it now wished to!

President Answers Questions on START Treaty

LD0302215994 Kiev Radio Ukraine World Service
in Ukrainian 1130 GMT 3 Feb 94

[Question and answer session with Ukrainian President Leonid Kravchuk by deputies, following speech by Kravchuk on nuclear issues at Supreme Council session in Kiev—live]

[Text] Dorohuntsov, not further identified: Esteemed Leonid Makarovych, I know that you signed the statement and an appendix to this statement, which is not very simple and is not very easy for Ukraine. I believe that you were forced to do so. That was a political decision which will have very important consequences for Ukraine, and you have probably assessed these consequences. I support your stand and I will vote in its favor. Unfortunately, I believe that we do not have an alternative.

However, I have the following question for you. As is known, our disarmament—the technical details are up to specialists and we are not specialists—requires significant expenditures. What will Ukraine's share—if there is no possibility to express it in absolute figures—of these expenditures be, and what will the share of the so-called world community be? This is a very serious question for us. I think here we could do our best to take as much as possible; unfortunately, it is not us who make these decisions unilaterally. So, I would only like you to express your opinion on this matter. In addition, it would possibly be good if this brief discussion of ours is broadcast in full. Thanks for your reply.

Kravchuk: True, when a resolution is being adopted in this hall, or some law, we try to write down in it our maximum

needs and our maximum benefits, and this can be understood. And when the law or some resolution is implemented, and when more than one country—and here three or four countries are involved—compromises are inevitable, otherwise one would never adopt anything. Not to adopt a decision at a time when there is a Supreme Council resolution and to drive this problem into a blind corner would mean extremely grave consequences and a threat to the security of Ukraine, and not only Ukraine.

I underscore that I was guided by the reservations, which is the main thing. Second, in order for you to understand, I was guided not by the pressure which was applied and which always exists, but by the realities facing Ukraine. And the realities, which I have already told you about, are these: Today Ukraine cannot safely maintain and service the nuclear weapons which we inherited. These weapons are becoming obsolete and pose a threat to us. If one fails to understand this, the rest is derivative. If we act appropriately, others will adopt an appropriate attitude toward us. As far as specific expenditures are concerned, relevant calculations are already available. Both the United States and the European community already say that the financial aid figures for dismantling the nuclear weapons will be doubled.

Second [as heard], the warheads will be dismantled in Russia, and Ukraine will be compensated for them according to world prices, less the expenditure for their dismantling.

The next steps connected with silos and launcher vehicles will be agreed upon on the basis of other agreements to be worked out on the basis of the resolution. This is because there are problems here. We cannot blow up the silos because they are located in densely populated areas. However, these issues will be stipulated in other agreements. Today the talk is about the fundamental decisions and about those fundamental decisions which the Supreme Council reservations dealt with, and we are trying to implement them.

Yakheyeva: Tetyana Yakheyeva, Electoral District No. 438. First, I have a procedural comment to make on the president's legislative initiative. This probably relates to the lawyers that he consulted. Leonid Makarovych said that he submitted to the Supreme Council a draft resolution on the accession of Ukraine to the Nuclear Non-proliferation Treaty. The treaty itself, however, was not submitted to the Supreme Council. I would like everyone to know about this. This is like adopting a resolution bringing a law into effect, with the law itself having not been under consideration.

Second, esteemed Leonid Makarovych, I have several very short questions. The following situation has arisen on the issue of nuclear weapons: Our executive power is governed exclusively by statements and declarations, being purely political documents, and pays no heed whatsoever to resolutions and laws adopted in Ukraine, or to its military doctrine or foreign policy. This is why I have this question to you: Do you think the implementation of this trilateral statement is obligatory for executive power?

The second question is this: What agreements were concluded during the negotiations on the fulfilment of the reservations? For example, was any agreement concluded on the civilian use of silo launchers, compensation, or anything else? Was it or was it not?

Finally, the last question: According to the foreign media, which writes in the words of members of the American delegation, some secret accords were reached during these negotiations, the contents of which will forever remain unknown to anyone. Were such accords reached or is it untrue? Thank you.

Kravchuk: I would like to start from the end. A package of all the documents which were signed was published. Other protocol records related to purely technical matters rather than, shall we say, any issues of principle, because it is about elimination, withdrawal, their procedure, character, the timetable, and so on, and not about political documents, which would be of an obligatory nature and which were published in the press. In other words, what you are probably referring to is these protocol records. I cannot say anything else, I have not read it, so unfortunately I do not know what the press writes about.

Is the statement of an obligatory nature? The statement is of an obligatory nature in that we now—except, shall we say, that we, on the basis of existing reservations and of the Supreme Council's resolution—can act accordingly, having implemented these reservations with regard to 36 and 42 percent of the missiles subject to elimination and reduction. We can act right now. So in this sense it is of an obligatory nature, because it corresponds with the Supreme Council's resolutions. It does correspond with it.

As for what you are saying about other agreements, I have already said that these issues are settled after decisions of principle are made. Then the issues of specific agreements, specific issues, are settled. They by all means will be made at governmental and inter-governmental level after being worked on by experts. This is a whole number of documents rather than one document.

Supreme Council Resolution on Nuclear Weapons LD0302211694

[Editorial Report] Kiev UNIAR in Ukrainian at 1730 GMT on 3 February carries a 350-word Ukraine Supreme Council resolution on the START I Treaty as follows:

"The Supreme Council of Ukraine has resolved:"

- "1. Taking into account the specific measures taken by the president and Government of Ukraine regarding the implementation of the provisions of the Supreme Council resolution dated 18 November 1993, and the steps to meet Ukraine half-way on the part of the United States and Russia, in order to remove the reservations regarding the article of the Protocol to the START Treaty signed in Lisbon on 23 May 1992."
- "2. To charge the Government of Ukraine with carrying out the exchange of instruments of ratification of the START Treaty."

"3. To accede to the Nuclear Non-Proliferation Treaty dated 1 July 1968, which will hereafter be termed the Treaty, as a state not owning nuclear weapons, with the following statement:"

"(1) Ukraine owns the components of the nuclear weapons that it inherited from the former USSR, and after the weapons have been dismantled and destroyed under its control, and in accordance with procedures that will rule out the possibility of reusing these weapons' components for the original purpose, Ukraine intends to use the material extracted from them exclusively for civilian purposes, in particular as fuel for Ukrainian AES [nuclear electric power station], or receive compensation for them;"

"(2) The Nuclear Non-Proliferation Treaty [NPT] does not fully cover the unique situation that arose as a result of the disintegration of the USSR as a nuclear state. The presence of nuclear weapons on the territory of Ukraine until they are eliminated entirely, as well as appropriate activity to maintain, service, and eliminate them, does not contravene the provisions of Articles 1 and 2 of the Treaty."

"(3) Ukraine will hold talks with the International Atomic Energy Agency with the aim of concluding agreements regarding the guarantees envisaged by the Treaty."

"(4) The violation of the territorial integrity or inviolability of Ukraine's borders on the part of any nuclear state will be viewed by Ukraine as a violation of the Treaty."

Kiev UNIAR in Ukrainian at 1900 GMT on 3 February then carried the following service message:

"The news agency RESPUBLIKA [UNIAR] apologizes for the incorrect information about the approval by the Ukrainian Supreme Council of the resolution on the fulfillment by Ukraine's president of the Supreme Council of Ukraine recommendations made during the ratification of the START I Treaty. The Supreme Council approved a resolution of two items:"

"1. Taking into account the specific measures taken by the president and Government of Ukraine regarding the implementation of the provisions of the Supreme Council resolution dated 18 November 1993, and the steps to meet Ukraine half-way on the part of the United States and Russia, in order to remove the reservations regarding article of the Protocol to the START Treaty signed in Lisbon on 23 May 1992."

"2. To charge the Government of Ukraine with carrying out the exchange of instruments of ratification of the START Treaty. With this aim to step up the activity of the Government on concluding specific international agreements stemming from the reservations of the Supreme Council resolution on the ratification of the START I Treaty."

"Item 3 on Ukraine's accession to the Nuclear Non-Proliferation Treaty was excluded from the resolution due to the fact that it was not discussed in Parliament. Deputy Sergey Golovatyy made a remark to the effect that Ukraine could not announce itself simultaneously a nuclear state while acceding to START I and a non-nuclear state while participating in the Nuclear Non-Proliferation Treaty. Issues of compensation for the nuclear weapon components were touched upon with regard to the difference in prices for the fuel uranium on the U.S. internal and external market, etc. Deputies Sergey Golovatyy, Tetyana Yakheyeva, and Sergey Semenets proposed to discuss this in the standing commissions, and to then submit it for the consideration of the Supreme Council. After this the issue on accession to the Nuclear Non-Proliferation Treaty will be solved."

Shmarov Comments on Denuclearization, Funding
WS0402083094 Kiev UKRAYINA MOLODA
in Ukrainian 1 Feb 94 p 3

[Interview with Ukrainian Deputy Prime Minister Valeriy Shmarov by Olena Lisychna; place and date not given: "Ukraine's Last Nuclear Season"—first two paragraphs are UKRAYINA MOLODA introduction]

[Text] Deputy Prime Minister Valeriy Shmarov, who headed Ukraine's delegation to negotiations in Washington on the eve of the Moscow meeting, has indeed become a hero of Ukraine's last "nuclear" season.

For a while, the legislature has put aside discussion of the "nuclear" agreement. If the Supreme Council does not support the Moscow agreement, Ukraine will experience "hard days," claims Valeriy Shmarov. At the same time, Valeriy Shmarov does not support illusions that Ukraine will receive weighty credits and investments. However, he believes that even "small sums are better than nothing."

Lisychna: This "nuclear" history still has many white spots, and the issue of compensation for our tactical nuclear weapons is of extreme interest.

Shmarov: Indeed, for quite a long time, Russia did not agree to our demands for compensation. However, at the last stage of the negotiations, Russia recognized our ownership of the tactical nuclear weapons and we discussed, in general, forms of holding our mutual accounts. We will cancel part of our debts for energy resources by transferring these tactical nuclear weapons to Russia. In the first place, in my opinion, this is better than nothing. In the second place, Ukraine cannot enjoy equal partnership because it has amassed enormous debts to Russia.

Lisychna: Valeriy Mykolayovych, what part of our debt could be canceled?

Shmarov: The more the better. I estimate our 1993 debts to Russia at \$1 billion, while 1992 debts—at \$2.5 billion. In my opinion, we could settle 50 percent of our 1993 debts.

Well, the issue of strategic nuclear weapons is also very complicated. Economic calculations were based on data drawn from the worldwide uranium trade. The U.S. side will be a guarantor of the fulfillment of this agreement by

the Russian party. A tripartite commission will draft the contract on this agreement in three-months time.

Lisychna: Who will pay for the processing of uranium in Russia?

Shmarov: This expense is included in the costs of Ukrainian deliveries to Russia. One more positive moment for Russia: Russia will be paid by the United States for each weapon dismantled on the territory of Ukraine.

Lisychna: Is this payment for work or a kind of moral support?

Shmarov: This moral support means big money. In general, the United States is deeply interested in the dismantlement of nuclear weapons because the missiles are still directed at the United States, despite the fact that the button is in Moscow.

Lisychna: For how long can our nuclear power plants work on the fuel which we are going to receive from Russia as part of our compensation?

Shmarov: Yearly, we require 100 tonnes of nuclear fuel. Currently, we are short of nuclear fuel. Our nuclear power plants could work for five to seven years on the fuel which will be delivered under the Moscow agreement.

Lisychna: Our legislature must adopt the START I and START II Treaties and Ukraine should sign the Nuclear Nonproliferation Treaty before the Moscow agreements can start being implemented....

Shmarov: If these agreements are not implemented, Ukraine will experience hard times. We have held a series of consultations in the Supreme Council. The deputies understand the importance of these agreements. In addition, after the Supreme Council says "yes" or "no," we will have to draft nine agreements on compensation issues. I hope that the Supreme Council's decision on the issue will be positive.

Lisychna: On 25 January, IZVESTIYA published this report: "The second Chernobyl is under way. The dismantlement of old missiles in Ukraine has been stopped for an indefinite period due to the lack of military storage bases, transport, and material assets." Is this report true?

Shmarov: These facts are partially true. Currently, we lack containers and means of transport. However, the Moscow agreements foresee that Russia will provide us with equipment and means of transportation.... The Russian Defense Ministry will deliver everything on time.... In general, our agreement with Russia is based on mutual relations: We also deal with servicing of nuclear-armed SS-24 rocket launchers in Russia because they were produced in Ukraine.

Lisychna: Valeriy Mykolayovych, what about the sum of \$2.8 billion? In late 1993, Ukraine demanded that this sum be earmarked for the dismantlement of its nuclear weapons. However, it turned out that this figure was also false. So, what sum does Ukraine currently require?

Shmarov: The figure of \$2.8 billion is likely to be too big. In my opinion, we require more than \$175 million or even \$1.75 billion. Well, concerning the so-called U.S. financial aid, I insisted (even during my stay in Washington) that the

United States should increase its aid within the framework of the Nunn-Lugar program. The U.S. side has promised this. It is more important for us to not receive consultations (we have our own experts) or a system of satellite communications, but modern equipment, diesel fuel, assets for social protection of servicemen, etc.... Or, simply put, our requirements are more practical.

Lisychna: Bill Clinton said at the Boryspil airport that Ukraine can use funds from the Nunn-Lugar program for purposes of conversion and defense....

Shmarov: These means are miserable. As for conversion, we have signed an agreement between the Pentagon and the Ukrainian Ministry of Machine Building on the issue of cooperation in the sphere of conversion. This could be one more source of financial resources because we could draft projects in which Americans could become interested.

One more positive element of the Moscow agreement is the extension of our relations. Currently, our government delegation is working in the United States. Our economic cooperation with the United States currently stands at \$500 million.

Lisychna: Valeriy Mykolayovych, how can you predict that investments and credits will flow to a denuclearized Ukraine? Our economic reforms are at a standstill.

Shmarov: This is a difficult question. U.S. business circles are dissatisfied with the course of reforms in Ukraine. However, they consider our issue of denuclearization to be of key importance, and the issue of economic reforms is of secondary interest to them.

In my opinion, the United States will not force us with the implementation of these reforms. Though, some people think this way.

Zlenko Speech at Parliament Session

LD0402184094 Kiev Radio Ukraine World Service in Ukrainian 1142 GMT 3 Feb 94

[Speech by Foreign Minister Anatoliy Zlenko at the Supreme Council session in Kiev on 3 February—live]

[Excerpts] Esteemed deputies, esteemed president, esteemed Ivan Stepanovych. You understand that the question or the whole problem of nuclear weapons that are located in Ukraine remains, for the moment, the most important problem. I would like to begin by saying that after the Supreme Council's ratification of START I, neither Russia nor the United States recognized the act of ratification as though it had taken place. Obviously, this is why we were forced to deal with an extraordinary situation and forced to resolve, in a short period of time, exceptionally complex issues. I would like to say that the situation developed in a very complicated way. Since the first days of Ukraine's independence we had never felt such intense international pressure, the main aim of which was to isolate us as quickly and as broadly as possible internationally. The main thing that is almost completely unacceptable and was unacceptable and which provoked the toughest reaction was the refusal by Ukraine to accede to the Nuclear Nonproliferation Treaty [NPT]. On this issue I would like to assure

you that there is an absolute consensus by CSCE member countries. The treaty should be universal and undoubtedly extended for an unspecified period. We have been given to understand that by refusing to accede to the NPT, Ukraine is joining a group of states that do not have a very high rating in the world and many of the world's democratic countries are talking about this. The second thing is that doubt was cast on the very fact that Ukraine would ratify the START treaty and a rumor was spread that Ukraine was reviewing its policy of attaining nonnuclear status as set out in its basic foreign policy documents. Obviously great harm was inflicted on Ukraine's international image. I will be frank. To achieve glory as an unreliable international partner that fails to abide by its promises—moreover a country that is only two years old—is a very disadvantageous and I would even say almost hopeless situation. To remain without support in the world community, even if one thinks one is right, is a losing game. You do not have to go far for examples.

I would like to note separately that President Leonid Makarovych Kravchuk's position on this, which he announced in a speech soon after the ratification of the START treaty, is exceptionally important. It was really an important political and diplomatic step. Thanks to it we managed to avoid, without any exaggeration, serious complications. Such a position left the doors open for us for contacts and for future work. How did our foreign policy department act under these conditions? I would like to tell you, esteemed people's deputies, that practically in the first hours following the ratification of the START treaty, the ministry began work on explaining the content of the Supreme Council's resolutions and the motives that caused it to raise the reservations at the time of ratification. [Passage omitted: Explains the mechanism by which Ukrainian embassies informed foreign ministries of other states and how Ukraine's foreign minister personally wrote to all the world's leading states, including the UN and NATO general secretaries, explaining the Ukrainian position on the ratification of START; Kravchuk's 30-minute telephone conversation with President Clinton and his telegrams to Russian President Boris Yeltsin; explanatory work carried out at the CSCE conference in Rome; Ukraine's negative image reflected in various publications]

You recall the phrase spoken by our president, Leonid Makarovych: It is the first time that I am experiencing such a difficult situation that Ukraine was fated to endure at the beginning of December 1993. We did not broadcast this widely. We could not do this because we understood that the nation might not be able to withstand all this. We dealt with this and worked on it calmly and took it to its conclusion. Esteemed deputies, international isolation—and I would like to place particular emphasis on this—creates such an attitude in the world toward an isolated country that any kind of forced methods against it are received as a naturally forced reaction to its behavior. As an example, I would like to remind you of the course of events on the eve of the war in the Persian Gulf. Then the United States and its allies made use of the full isolation of Iraq almost six months before the military operation, to find support for its actions throughout the entire world community. It was a great

mistake not to take into account Russia's reactions on the possible transformation of Ukraine into a nuclear state. You are aware that such an option is not only unacceptable to the political and military leadership of that country but also plays the role of a popular slogan for those like one of the winners in the recent elections who support the transformation of Ukraine into a new Russian province [huberniya]. In this connection I would like to return to the key issues for our security and future as an independent state, the value of nuclear weapons as a restraining factor. Foreign experts and the overwhelming majority of those who understand these things tell us: that the only weapon capable of halting aggression is the one that can be put to real use by inflicting unacceptable harm on the aggressor. Not only us, but all nuclear state know that Ukraine does not have operational control over the nuclear weapons located on our territory. [Passage omitted: Repeats Kravchuk's statements about not being able to service the weapons and that they are a threat to Ukraine's own security]

I would also like to dwell on safeguarding Ukraine's interests and above all the national security of our state. It seems that the state of our economy clearly underlines an obvious and undeniable truth or thesis that is only too obvious today: that the main component of any state's security is a healthy economy and socio-political stability in society. If this does not exist, no kind of nuclear weapon, even if it is controlled and reliable, will help. The example of the former USSR serves as an example, and Leonid Makarovych [Kravchuk] spoke about this. We must consider whether we can preserve independence achieved at this price if, having found ourselves in isolation and without friends in the world, we encounter a situation where supplies of energy sources and in particular of nuclear fuel, are completely cut off and every kind of economic cooperation is frozen. Could we survive for long? [Passage omitted: speaks about the problems of Ukraine's nuclear power industry, the trilateral talks in Moscow, the foreign ministry's utmost attempts to defend Ukraine's position at the talks; the need for compromise: the agreement fulfils the conditions set out by the Supreme Council on 18 November 1993; sums up the arguments in favor of Ukraine getting rid of nuclear weapons including the end of Ukraine's isolation]

We will be frank, esteemed deputies. It is a serious and difficult political decision but I am certain that it is the only one possible under the present conditions. It is about preserving not only Ukraine's positive image in international relations but about the very survival of our state. Thank you for your attention.

Deputy Disputes Official Text of START Resolution

*LD0802222994 Kiev UNIAR in Ukrainian 2119 GMT
8 Feb 94*

[Text] Kiev, 8 Feb—"Officials from Ukraine's leadership circles have falsified the Ukrainian Supreme Council's resolution of 3 February 1994 [ratifying the START I Treaty]." People's Deputy Serhiy Holovaty claims.

During the debate on a draft resolution on the trilateral statement by the Ukrainian, U.S. and Russian presidents.

Deputy Serhiy Holovatyy put forward an amendment to Paragraph 2, as follows: "To this end (in order to exchange ratification certificates), government activity should be stepped up to conclude specific international agreements that follow from the reservations in the Supreme Council's resolution on the ratification of the START I Treaty [the resolution now in question is that of 18 November 1993]."

This version of the resolution was approved by the Supreme Council of Ukraine. In the official text of the resolution, however, a different version of Paragraph 2 was presented. Namely, the words "to this end" were excluded. Thus, the contents of the Supreme Council's decision on this issue were essentially altered. The text of Paragraph 2 in its amended version makes provision for the following sequence of the Ukrainian Government's actions relating to the START I Treaty: first, concluding international agreements [words indistinct] Holovatyy, it was stated that Ukraine lifted all reservations relating to the START I Treaty, also including security guarantees. [passage indistinct] In fact, this does not conform with reality.

Military Reportedly Breaks Tripartite Nuclear Accord

*MK2801112094 Moscow SEGODNYA in Russian
28 Jan 94 p 1*

[Pavel Felgengauer report in the "Confrontation" column: "As of February, Ukraine Will Begin To Remove 490 Warheads to Its Own Bases. The Russian Army Is Preparing To Evacuate Missile Troop Officers"]

[Text] The joint Russian-U.S.-Ukrainian agreement of 14 January on the terms for the abolition of the "Ukrainian" nuclear weapons, signed in Moscow by the three presidents, has apparently proved not more long-lasting than previous such accords. A week after the ink had dried on the Moscow declaration, the Ukrainian Defense Ministry began, without any coordination with Moscow, an operation of actually seizing the strategic nuclear weapons.

On 21 January Army General Lieutenant Vladimir Mikhtyuk, commander of the 43d Missile Army, and also the commanders of the 46th (Pervomayskaya) and 19th (Khmelnitskaya) missile divisions were summoned to Kiev to a session of the Ukrainian Defense Ministry Collegium "on matters of military discipline and training." The army commander reported this to Moscow, to the Main Command of the Strategic Rocket Forces (SRF), because under an order that has been in effect for 33 years, the SRF army or division commander may not leave his unit without permission from the SRF commander in chief. In Kiev, however, the generals were suddenly ordered to swear the Ukrainian oath of allegiance. Gen. Mikhtyuk and Nikolay Filatov, commander of the 46th Division, under what one of the participants in the conference described as tough pressure, swore the Ukrainian oath. Rustam Karimov, commander of the 19th division, refused.

After that the 43d Missile Army was actually placed outside the SRF Main Command's operational control. General Karimov has been removed from the post of division commander and is to fly to Moscow within the next few

days. Today or tomorrow a new, "Ukrainian" commander will arrive at the 19th Missile Division who will be appointed by the Ukrainian defense minister without any coordination with Moscow. The SRF Command stated that they do not even know the new commander's name. Prior to that, during the last two years, all cadre reshuffles in the missile troops in Ukraine were made only by a joint order after they were coordinated in Moscow and Kiev.

On 22 January the Ukrainian defense minister signed Order 001 (classified as top secret) whereby the troops of the 43d Army must be prepared as of 1 February to begin removing the nuclear ammunition from the depots of the 19th and 46th divisions (all in all, 490 units) to "S" installations, from where Russian specialists were withdrawn last year and where the Ukrainian Defense Ministry has deployed its own nuclear units, manned partly by officers of the 12th Main Directorate of the Russian Defense Ministry who stayed in Ukraine and partly by reserve officers. Colonel General Igor Smirnov, SRF commander in chief, sent a coded telegram to the Ukrainian defense minister expressing in a polite form his professional concern over the situation, but has not received any answer yet.

The SRF Main Command is currently making preparations for an urgent evacuation to Russia of all missile officers who refuse to swear the Ukrainian oath. According to SRF Main Command estimates, between 40 and 50 percent of the officers will leave. The divisions will become combat-incapable, the combat duty system will be disrupted, and political confrontation in missile unit crews between "pro-Ukrainian" and "pro-Russian" officers is possible.

Up until now Russia has been rendering the 43d Army technical assistance in maintaining its entire extremely complex strategic missile systems while officers have been undergoing regular retraining within the SRF framework. Now supplies and technical assistance for the army have been stopped. The Russian military is no longer in control of the situation. It believes that it has done everything possible within its jurisdiction and that now the problem of the Ukrainian nuclear weapons will again have to be decided by politicians in Moscow, Kiev, and Washington.

Missile Detargeting, Continuing Danger Eyed

*PM2601124594 Moscow ROSSIYSKAYA GAZETA
in Russian 26 Jan 94 First Edition p 1*

[Military observer Vladimir Kijmov "Topical Commentary:" "Where Are Missiles Targeted?"]

[Excerpts] Hamlet's question "To be or not to be?" remains the main question of the day. I was surely not the only one to think so on learning that the Russian and U.S. presidents had announced the detargeting of strategic missiles in the Moscow declaration.

"For the first time since the beginning of the nuclear era our countries have stopped targeting missiles at each other," Major General Anatolii Svetikov, deputy chief of the Strategic Rocket Forces Staff Directorate, believes. [passage omitted]

Yet the past is still with us. The following questions have arisen from there, from the alarming past: Is the retargeting of missiles and their return to their former condition possible and how long would this take? Let us allow the specialist, Maj. Gen. Svetikov, to speak:

"The process of introducing and scrapping missions operates on many levels and planes. It varies for different categories and types of missile. The scrapping of missions will depend on the principle chosen by the two countries' presidents. As regards resumption, I can say that as long as a missile is on alert status there is always a possibility of returning everything to its former place. How long will this take? Long enough, although the times vary for different categories and types of missile. I do not intend to talk about time periods but have singled out the most important thing: the implementation of the presidents' decision sharply reduces the threshold of a nuclear strike."

How nice it would be to put a period after such an optimistic conclusion and to exclaim joyfully "The End!" Alas, there is still a long way to go before the end; dreams about a complete ban on nuclear weapons still remain dreams. The nuclear danger comes not from across the ocean but from Russia's doorstep—Ukraine. Its president pledged to transport nuclear warheads to us for dismantling. But some of them are already in a critical condition.

Yet again we have to talk of the unreasonableness of certain vociferous politicians. Specialists, foreseeing the complexities with missiles, made an agreement about centralized maintenance of them. But some Ukrainian deputies saw Moscow's evil hand in this too. The agreements, which did not need parliament's ratification, were blocked by it. We, they said, will overcome.

But how can routine inspection and maintenance work and the maintenance of missile complexes be undertaken when there are not enough resources or specialists? The result of the deputies' veto is the alarming technical condition of missiles in Ukraine. Following inspection, warheads were removed from some missile launchers which had simply become dangerous.

Hamlet's question has now crystallized over these missile silos. How will people answer it?

Kiev Military Retarding Missile Arrangements

*PM0202101594 Moscow TRUD in Russian Night
Edition 1 Feb 94 p 1*

[TRUD military observer Viktor Badurkin commentary under the "View on Situation" rubric: "Should We Have No Faith in Signed Document?"]

[Text] The signatures of Presidents Boris Yeltsin, Leonid Kravchuk, and Bill Clinton had hardly dried out on their joint Statement on the future fate of Ukrainian nuclear missiles when it began to be "torpedoed" in Kiev in parliament and especially at the Ministry of Defense. Whereas the parliamentarians restricted themselves to verbal criticism of their president's conciliatory behavior

and their dissatisfaction with the amount of compensation for nuclear disarmament, the generals immediately embarked on decisive action.

At first the idea developed at the heart of the military department of retaining on a temporary basis at "S" facilities (special bases) the nuclear warheads which had been separated from their delivery vehicles. And then a week ago an unexpectedly but very insistent proposal was made at the ministry collegium that the command of missile troops stationed on Ukrainian territory should take an oath of allegiance to Ukraine.

On the subject of the political "overtones" of the moves by the Ukrainian Defense Ministry, it is hard to see them as anything but a clear challenge to the line which Leonid Kravchuk is pursuing with regard to the state's nuclear disarmament. After all it is clearly written into the Moscow agreement that all nuclear warheads should be withdrawn from Ukrainian territory to Russia for the purpose of their subsequent dismantling in the shortest possible time. You might ask, why then compel the missile troops' officers to take an oath of allegiance to Ukraine, why form their own missile troops, and why create a command center for strategic nuclear forces?

You can only come to one conclusion: The Kiev generals are, irrespective of the consequences, attempting to draw out the process of handing over the nuclear weapons to Russia. What is more, this is being done to the accompaniment of public assurances from the minister Vitaliy Radetsky about the soundness of the three presidents' decision.

I think that the key to this paradox is fairly simple. In order to command strategic forces you have at least to have some, otherwise the number of posts is cut, which means a loss of power, privileges, and everything else which guarantees the rank of general. Therefore, the Ukrainian military's reaction is completely understandable. It is more difficult to explain the parliamentarians' behavior. Colonel General Yevgeniy Maslin, chief specialist in nuclear missiles at the Russian Ministry of Defense, told me about his recent appearance before Kiev deputies. For about an hour he explained to them how dangerous it is not only for Ukraine but for the whole Europe to continue to store nuclear weapons without proper maintenance and replacement of their components, after which questions were put to him in rapid succession, including for example: But how much will Russia be able to afford for the Ukrainian warheads? An example of how politics and trade are interconnected....

Meanwhile, for some reason nobody is taking any interest in how much it will cost Russia to dismantle the "independent" [Ukrainian] munitions. Very likely much more than the \$60 million the United States has appropriated for this purpose. (Incidentally, even this money is not "compensation" from kindly Uncle Sam for hazardous work undertaken, nor is it disinterested aid, but merely an advance made against the Russian share in the contract for highly enriched uranium.) At the same time Russia has also agreed to provide Ukraine with fuel assemblies for nuclear power stations containing 100 tonnes of low-enriched uranium as

the a first installment of the settlement for 200 missile warheads which in the next 10 months should be transferred to our plants for dismantling.

If the Kiev politicians and generals do nevertheless manage to draw out this process, we may all regret the consequences. The price of procrastination is too high—radiation respects no borders. Three SS-24 missile warheads which were recently urgently transported to Russia in a dangerous [predavariynny] condition proved this. Due to periodic technical maintenance not being carried out at the proper time, hydrogen and other constituents began to accumulate in them resulting in a buildup of explosive gas. Apart from this, as time goes by nuclear munitions are subject to corrosion, the products of which are toxic and radioactive. There are after all 46 SS-24 missile launchers, 130 SS-19 launchers, and about 40 TU-160 and TU-95 heavy bombers of the Navy, for which almost 670 long-range cruise missiles with nuclear warheads are in storage.

Missile complexes began to be wound down in November and the Ukrainian storage facilities are at this moment already overflowing with nose sections and nuclear weapons taken off alert status, which has significantly increased the background radiation. This is no empty claim but a fact confirmed by the chief designers from Arzamas-16 who have visited Pervomaysk. It is at the very least shortsighted and foolhardy not to take what they say into consideration.

There is one more side to the question. Next year the Treaty on the Nonproliferation of Nuclear Weapons runs out. If Ukraine does not become a party to it as a nonnuclear power, a dangerous precedent will be set for the whole world. In such circumstances the notorious "domino" effect cannot be ruled out as there are more than enough people wishing to follow this bad example, including those along Russia's southern borders.

We can only rely on the good sense of Kiev's politicians and the Ukrainian president's ability to carry out the adopted decisions and to keep to the obligations he signed with his own hand.

Minister Urges Use of Own Nuclear Fuel

AU0402154894 Kiev UKRAYINSKA HAZETA
in Ukrainian 3-16 Feb 94 p 1

[Article by Yuriy Kostenko, Ukraine's people's deputy, head of the deputies working group for nuclear disarmament issues, and minister of environmental protection: "'General Atomics' Is Precisely What Ukraine Urgently Needs"]

[Text]

At the Request of UKRAYINSKA HAZETA, a True Specialist Shows How To Make Proper Calculations With Pencil in Hand

1. Among the possible variants for utilizing the highly-enriched uranium removed from nuclear warheads, the proposal by the American "General Atomics" company was the most acceptable. The contract provided for creating in Ukraine a joint enterprise to process highly-enriched uranium and transform it into nuclear fuel for atomic electric power plants [AES's].

The following are the advantages of this variant:

- no expenditure associated with the transportation of highly enriched uranium;
- with the help of contemporary ecologically safe technologies, highly enriched uranium may be effectively transformed into fuel;
- conditions are created for Ukraine to earn hard currency rapidly;
- Ukraine's long-term technological cooperation with the world's advanced companies in the sphere of nuclear power engineering.

An enterprise, more specifically a small production unit, may be built within one or two years. The cost of the construction is \$30 million. After the fulfillment of the program for processing the highly-enriched uranium, the production may be reprofiled for the needs of Ukraine's nuclear-fuel cycle.

2. The transfer of nuclear warheads to Russia is stipulated by interstate documents "The Main Principles of the Utilization of Nuclear Charges of the Strategic Nuclear Forces Deployed in Ukraine" and "The Agreement Between the Ukrainian Government and the Government of the Russian Federation on the Utilization of Nuclear Warheads," which were signed on 3 September 1993 in Massandra [in the Crimea] during the meetings of presidents L.M. Kravchuk and B.N. Yeltsin. In accordance with the clauses of the aforementioned agreements, Ukraine committed itself to transferring to Russia all types of nuclear warheads of intercontinental nuclear missiles and air-launched cruise missiles for them to be dismantled and utilized.

No other possible variants of dismantling nuclear warheads were considered.

3. On the world market, the price of nuclear fuel, which is supplied in accordance with long-term contracts, amounts to between \$1,000 and \$1,400 per kilogram. One-time agreements on fuel supply are somewhat cheaper—between \$600 and \$700 per kilogram.

Ukraine receives all its fuel for atomic plants from Russian enterprises at prices close to world prices. However, practice shows that the majority of world countries with nuclear power engineering have their own enterprises that manufacture fuel cartridges because it is economically rational. Ukraine has large deposits of uranium ore and some functioning enterprises of the nuclear-fuel cycle—the enrichment of crude uranium, production of zirconium for heat-generating elements, absorbing materials, and so on. That is why it would be much more profitable for Ukraine to manufacture our own fuel cartridges than to purchase them from Russia. The cost of constructing such an enterprise is about \$500 million; it could be built within two or three years; in the conditions prevailing in Ukraine, the period of recoupment would be three years.

4. If we proceed from the assumption that capacities for the production of nuclear fuel are created in Ukraine, something upon which Ukrainian nuclear specialists and scientists insist, then it is most expedient to use nuclear materials from the warheads for the needs of our own power engineering.

If nuclear warheads are transferred to Russia, it is much more profitable for Ukraine to receive compensation for the nuclear materials, and not compensation in the form of nuclear fuel. For example, in accordance with some estimates, the cost of highly-enriched uranium is 100 times that of the price of low-grade uranium contained in the fuel cartridge, and weapons-grade plutonium costs between five and 10 times that of the highly-enriched uranium. That is why Ukraine is entitled to compensation of \$10 billion for the nuclear materials from tactical weapons alone. The cost of all those fuel cartridges, which Russia promises to supply in exchange for Ukraine's nuclear weapons will only constitute between \$1 billion and \$2 billion.

5. The problem here lies not so much in the inability of scientific collectives as in the absence of desire on the part of our leadership to do something.
6. In accordance with Ukraine's Supreme Council decree "On Additional Measures for Ensuring Ukraine's Non-nuclear Status," which was adopted in April 1992, the government had to take urgent measures to establish effective technological control over the nonuse of the nuclear weapons located on the territory of Ukraine. It was planned to have this work fulfilled by one of the Kharkiv Institutes which developed practically all systems of control over the former USSR's strategic offensive weapons.

The Supreme Council's decisions have not been fulfilled to this day and, for that reason, it is, probably, appropriate to speak about seven to 10 years, in order not to do anything at all.

Partnership for Peace is the attempt, on the part of the United States, without entering into a conflict with Russia, to fill in that vacuum of security that resulted from the disintegration of the Warsaw Pact and the USSR. However, in conditions of political instability and expansion of the revanchist moods in Russia, the West's indecisiveness in creating effective security systems in Europe may lead to yet another redivision of the spheres of influence and to a restoration of Russian hegemony within the CIS or Eastern Europe.

Situation in Nuclear Power Engineering 'Catastrophic'
AU2701104994 Lvov ZA VILNU UKRAYINU
in Ukrainian 21 Jan 94 p 3

[Interview with Vasyi Kotko, deputy chairman of Ukraine's State Committee for the Utilization of Nuclear Energy, by UKRINFORM correspondent Viktor Rozsokha; place and date not given: "How Much Is an Atomic Kilowatt?"—first three paragraphs published in boldface]

[Text] It is hardly necessary to explain what energy sources mean for Ukraine and for its economy today. Nor is it

necessary to explain that our standard of living increasingly depends upon the cost of electric energy, coal, gas, and fuel oil.

The conference of heads of Ukraine's basic industries—power engineering, metallurgy, and coal industry—that was recently held at the Cabinet of Ministers showed that there will be no easy decisions. Although there was consensus on the need to reasonably restrain prices of products, the very approaches to the forming of the tariffs were not responded to unanimously.

This is how deputy chairman of Ukraine's State Committee for the Utilization of Nuclear Energy Vasyi Kotko explains the position of atomic power engineers.

Kotko: Atomic power engineering is perhaps the only branch of Ukraine's national economy that finished the year 1993 with a marked growth in the volume of production.

However, the situation that has presently taken shape in the industry, is not simply difficult, but, one can say, catastrophic. All of the AES's [atomic electric power plants] are in an extremely difficult economic situation. Due to lack of funds, starting from the second part of 1993, virtually no fuel has been purchased. In 1993, the amount of fuel purchased was half that in 1990. Also, due to lack of funds, used nuclear fuel has not been taken out for long-term storage. Contractual relations with regard to equipment, spare parts, and scientific servicing of nuclear installations between the AES's and many suppliers have practically been severed....

Rozsokha: However, our atomic power engineering is fully cost accountable and depends upon the electric energy it produces. How could it happen that a branch with such growth in production volume has now almost become a financial bankrupt?

Kotko: The explanation here is in that the atomic power engineers have produced the electric energy and sold it to the state, but the state has not paid for it. There are two reasons here. An apparent reason lies in the fact that our main and only consumer—the National Dispatcher Center at Ukraine's Ministry of Power Engineering—does not pay at all or does not pay regularly for the electric energy received from us. The ministry's debt to the atomic plants is presently about 550 billion karbovantsi [K], or approximately the cost of our month's operation. However, this is how the matter appears. The main cause lies in our government's policy with regard to tariffs. By fixing the prices of electric energy, coal, and gas, it is trying to curb the total growth of prices in all branches of the national economy, more specifically, to curb inflation. I will point out that, from the beginning of 1993, the tariff for the AES's remained unchanged for almost half a year. The putting into effect of every new tariff was delayed by one or two months. As a result, inflation was not stopped, but power engineering resources were strongly depleted. It is even difficult to estimate the losses.

Rozsokha: What is today's rate of the electric energy produced by atomic plants?

Kotko: It is presently K118 per kilowatt/hour. However, on the whole, throughout last year, our rate was at least one-half that at thermal plants. AES's represent effective power engineering.

Rozsokha: Why then, in such an economic situation, can you not convince the government of the need to change the policy regarding tariffs?

Kotko: The government has officially recognized the need to change the tariffs policy. Moreover, it pointed out in its resolution that the prices of electric energy must change automatically only in those cases when the prices of energy sources increase by more than 20 percent.

Rozsokha: However, the Cabinet of Ministers does not fulfill its own decision. Why?

Kotko: Because it realizes that an increase in the prices of energy sources will lead to an increase of prices of everything else. That is why it is trying to maintain the previously set prices as long as possible.

It goes without saying that nobody—either the population or the government—wants to have the prices of bread, butter, and that same electric energy raised. However, this unpopular decision will later have to be adopted, but with more serious consequences.

Rozsokha: How much longer can the AES's persevere if this policy with regard to tariffs continues?

Kotko: I believe that we have now reached the limit and have exhausted the resources of the branch and, if such a policy continues, irreversible processes may start.

I think that if the situation does not change now, we will, tomorrow, find ourselves in a situation in which stoppages of some power units and possibly also of all atomic plants successively, will be inevitable. We now need to urgently revise our tariff, which must be at least K300 per kilowatt/hour. It must change with the rate of inflation. These are two minimum mandatory conditions.

AUSTRIA

Center To Train UN Chemical Weapons Inspectors

AU0302110494 Vienna DIE PRESSE in German
3 Feb 94 p 6

[Report by Norbert Rief: "Austria To Train Inspectors for Chemical Weapons"]

[Excerpt] Vienna—Austria will now once more participate in an international peacekeeping program. In the Seibersdorf research center, in Lower Austria, UN personnel of the Organization for the Prohibition of Chemical Weapons (OPCW) will be trained this year; the objective is that they can control civilian chemical plants. The OPCW inspectors should be able to find out whether chemical weapons are being or can be produced in chemical plants. [passage omitted]

FRANCE

Beneficiaries of 9-Billion-Franc Saudi Arms Deal Outlined

BR0202125194 Paris LE FIGARO in French 2 Feb 94 p 6

[Unattributed article: "Defense—Triple Contract With Saudi Arabia"]

[Excerpts] France and Saudi Arabia have entered into three armament contracts involving the upgrading of warships and the maintenance of ground-to-air missiles and anti-aircraft batteries, the Defense Ministry announced yesterday. [passage omitted covered in ref]

The three contracts are as follows:

- The ROH contract, worth Fr3.5 billion, provides for the upgrading of four 2,000-tonne frigates and two 10,000-tonne refueling tankers sold in 1980 (Sawari I contract). The upgrading, to be carried out in Toulon (Var region) by the French Naval Construction Division (DCN), entails over 3 million hours of work for DCN and 1.2 million hours for subcontractors and services suppliers (Thomson-CSF, Navfco). To this must be added the support services for the six ships' crews, which will remain on board during the whole upgrading process. To

take full advantage of this period of inactivity, some equipment and on-board weapon systems will also be upgraded.

- The SLBS (Logistical Support for Bitube and Shahine Systems) maintenance contract, worth Fr3.4 billion, is the continuation of the 'Al-Thaked contract (1984), which provided for the provision of short-range ground-to-air Crotale-Shahine missiles batteries and bitube 30-millimeter weapon systems (complete with command stations, carriages, and radars). French manufacturers will supply spare parts and technical assistance.
- The Shola maintenance contract, worth about Fr2 billion, involves rocket thruster units for short-range ground-to-air Shahine and Crotale missiles previously purchased by Saudi Arabia. The program provides for replacing several hundred thruster units intended for all missiles already sold, and includes technical assistance. Both missile-related contracts entail some 4.5 million hours of work, which will be distributed between project leader Thomson-CSF and its major subcontractors (Giat industrie, Renault Vehicules Industriels, Matra, SNPE [National Company for Powders and Explosives]).

TURKEY

Ataman on Joining Nuclear Nonproliferation Agreement

TA2601192494 Ankara TRT Television Network
in Turkish 1800 GMT 26 Jan 94

[Announcer-read report over video]

[Text] Turkey is pleased with the agreement reached among Ukraine, Russia, and the United States on the removal of the nuclear weapons in Ukraine.

Speaking at his weekly news conference today, Ferhat Ataman, acting spokesman of the Foreign Ministry, recalled that Ukrainian President Kravchuk recently confirmed his promise to join the nuclear nonproliferation agreement as a non-nuclear country as soon as possible. Ataman said: We see this as an important contribution to peace and security—which we are all trying to establish—and to the efforts to prevent the proliferation of nuclear weapons.

Agreement To Deploy U.S. Patriot Missiles in ROK Viewed

Deployment Agreement Reported

SK2901003494 Seoul THE KOREA HERALD
in English 29 Jan 94 p 2

[Text] Seoul and Washington agreed to deploy Patriot missile batteries at U.S. army bases in South Korea in March or April, a senior government official said yesterday.

He said the U.S. move for early deployment of Patriot missiles in South Korea is, in part, aimed at putting pressure on North Korea to come to an agreement with the International Atomic Energy Agency (IAEA).

If the North Korean nuclear problem is solved at an early date, the anti-missile missiles could be deployed in Japan instead, the official said.

He said U.S. President Clinton has not given final approval for the deployment of Patriot missiles, but is expected to approve it sooner or later.

"The South Korean government agrees to the deployment in principle and the interceptor missiles will be deployed at the bases of U.S. forces here in March or April at the latest," the official said.

He said the 36 Patriot missiles to be deployed here are for protection of strategic points of U.S. forces in South Korea rather than for defense of densely populated areas including Seoul and the surrounding metropolitan area.

Deployment of Patriots on the Korean Peninsula is the first step in establishing the Theater Missile Defense (TMD) system, which the U.S. government is pushing for on a long-term basis.

Washington confirmed Wednesday it was considering deployment of Patriot missiles in South Korea to defend its ally against North Korean attack.

Gen. Gary Luck, commander of U.S. forces in Korea, requested deployment of Patriot missiles late last year to prepare against Scud missile attacks by North Korea.

Press Overview of Deployment

SK2801081094

[Editorial Report] Seoul vernacular newspapers on 28 January carry articles and editorials on the pending U.S.-ROK plan to deploy Patriot missiles and other new weapons to the peninsula.

The moderate HANGUK ILBO carries on page 1 a 400-word report from Washington in connection with a U.S. plan to replace the existing Cobra helicopters deployed in South Korea with new Apache helicopters and to send an aircraft carrier to South Korea in addition to deploying Patriot missiles.

The report, quoting THE WASHINGTON POST dated 27 January, notes the Clinton Administration's plan to replace the existing Cobra Helicopter unit deployed in South Korea with two new-type Apache helicopter battalions.

The report also quotes THE WASHINGTON POST as reporting that "the Clinton Administration is ready to approve the plan to deploy Patriot missiles to South Korea requested by General Gary E. Luck, commander of U.S. Forces Korea, but it is now waiting for the ROK Government's final approval." The report continues to quote the U.S. paper as reporting that the ROK Government worries that the deployment of Patriot missiles "would irritate North Korea."

The report also quotes THE WASHINGTON TIMES as reporting that "the U.S. Defense Department is considering deploying an aircraft carrier on the waters near the Korean peninsula." The report quotes THE WASHINGTON TIMES as reporting that General Gary E. Luck requested one Patriot missile battalion which consists of "64 launching platforms, 256 Patriot missiles, and special radar devices which are capable of tracing several targets simultaneously."

HANGUK ILBO also carries on page 5 a 500-word article by Washington-based correspondent Chong Il-hwa on performance data of the Patriot missile and a 500-word article by reporter Yi Sang-won on that of North Korea's Nodong-1 long-range missile.

Noting in detail the formidable performance of the Patriot missile as demonstrated during the Gulf war, the article by correspondent Chong Il-hwa describes the process of the upgrading of the Patriot system.

The article by reporter Yi Sang-won notes that North Korea's Nodong-1 missile was reportedly developed from the former Soviet Union's surface-to-surface Scud missile developed in the 1980's and that it is reportedly now deployed for use in an actual war. The article notes the performance of the Nodong-1 missile, including its size and range, adding that North Korea is reported "to possess 12 to 18 Nodong-1 missiles at present." The article also cites that the Nodong-2 missile is now in the developmental stage.

HANGUK ILBO carries on page 7 an 800-word article by Washington-based correspondent Chong Chin-sok on the reasons for the pending U.S. plan to deploy Patriot missiles to the ROK. Noting the recent "hardline" moves by the U.S. Government in connection with the North Korean nuclear issue such as the pending U.S. plan to deploy the Patriot missile to the ROK, the CIA director's secret visit to Seoul, and U.S. Government officials' strong-worded remarks on the North Korean nuclear issue, the article says: "People hold that these moves are probably either a sort of nuclear negotiation card to apply pressure on North Korea or a political card for U.S. domestic purposes." The article says, however, the fact that the hardline moves against North Korea have been led by the Department of Defense and the CIA suggests that they are aimed at warning North Korea.

The article notes different approaches between the U.S. Department of Defense and the CIA and the Department of State in dealing with North Korea regarding the nuclear issue. The article concludes that the U.S. plan to deploy Patriot missiles to South Korea can be interpreted as a result of the hawkish line led by the Department of Defense and the CIA.

The moderate TONG-A ILBO carries on page 3 a 600-word editorial on the pending plan to deploy Patriot missiles to the ROK under the title "New Arrangement of the Situation on the Korean Peninsula." Saying that the plan to deploy the Patriot missile can be considered prior preparations taken in consideration of the start of the UN sanctions against North Korea, the article notes North Korea's protracted delaying tactics in the negotiations with the International Atomic Energy Agency and the United States. The article also notes the recent reports by Russian nuclear experts about the possibility of North Korea possessing one to two nuclear bombs, the CIA director's secret visit to Seoul, and the deployment of a "U.S. national intelligence support team" in the ROK, and says that these moves show that "a new move for arranging the situation on the Korean peninsula in connection with the North Korean nuclear issue is in progress."

The editorial continues: "In particular, the deployment of Patriot missiles to South Korea will bring a big change to the military situation of the Korean peninsula, regardless of whether it is intended to cope with the North Korean troops concentrated along the DMZ, whether it is a prior step in taking sanctions against North Korea, or whether it is 'a sophisticated tactic to sell' Patriot missiles to the ROK." The article concludes by stressing the need for our government to properly deal with the changing situation of the Korean peninsula.

TONG-A ILBO also carries on page 4 a 1,000-word article by reporter Kim Chae-hong. The article notes that "the U.S. plan to deploy Patriot missiles in the ROK can be considered to be an expression of the strong will of the United States to cope with possible North Korean provocation, but the ROK worries that the presence of Patriot missiles on the Korean peninsula would irritate North Korea and have a serious effect on the nuclear negotiations with North Korea."

The article is followed by a long explanation of the technological aspect of the Patriot missile, including its performance demonstrated during the Gulf war.

The moderate KYONGHYANG SINMUN carries on page 3 a 900-word editorial entitled "The Merit of Patriot Deployment." The editorial notes North Korea's persistent refusal to comply with the International Atomic Energy Agency [IAEA] demands for the inspection of its nuclear sites, increasing the likelihood of UN military and economic sanctions on North Korea, and says, "The U.S. plan to transfer to and deploy the anti-missile Patriot missiles to the ROK shows that the U.S. warning to North Korea in connection with the nuclear issue is becoming a reality. The ROK Government is inclined to accept the U.S. plan." The editorial then notes the deployment of Patriot missiles to the ROK has been considered for some time to augment the defense capability of the U.S. ground forces in the ROK to effectively counter the North's surprise attack, irrespective of the nuclear issue, in view of the difficulty of U.S. reinforcement forces in arriving in the ROK swiftly enough in case of a North Korean surprise attack. The editorial then notes the doubts about the performance of the Patriot missile which was used during the Gulf war, citing the U.S.

accounting audit personnel's revelation that the Patriot's capability of destroying the enemy's missile warheads was only nine percent. The editorial goes on to note the insufficient performance of the Patriot, namely, its fragments falling out up to one kilometer diameter, increasing danger for civilian casualties, and shrinking performance in mountainous areas like the Korean peninsula. The editorial concludes by noting, "It is, therefore, effective for combat purposes to deploy the much-improved second stage Patriot missiles. The deployment of the type which was used during the Gulf war could give an impression that the United States is disposing of old stock. The deployment of the Patriot should not be viewed only from the perspective of creating tension between the North and the South."

KYONGHYANG SINMUN on page 4 carries a 900-word article by New York-based correspondent Pak Su-man and reporter Song Yong-sung entitled "What Was the Background for the Deployment of the Patriot in the ROK?—Pros And Cons in the ROK and the United States." The article notes, "The U.S. Government plan to deploy Patriot missiles to the ROK implies that the United States is preparing for the potential circumstances where not only economic but also military sanctions will have to be taken in case of a failure to bring about the settlement of the North Korean nuclear issue." The article notes the view of U.S. intelligence agencies that the Patriot will be capable of protecting the targets of a preemptive North Korean missile attack on the ROK. The article notes some ROK Government officials show an unwelcome reaction to the U.S. plan but refrain from explicitly commenting on it under the weight of the cause of building up the combat capability of the ROK-U.S. combined forces. The article also notes, "Some are of the opinion that if the nuclear inspection negotiation fails and the situation aggravates leading to sanctions on the North, North Korea may well be angered by it, and that it will then be necessary for the U.S. Forces in the ROK to be equipped with an augmented combat capability to cope with such a situation." The article then notes insufficient performance of the Patriot and some ROK Government officials' view that the deployment of the Patriot is ill-timed for the North Korea-U.S. negotiation on the nuclear issue.

KYONGHYANG SINMUN on page 4 also carries an 800-word article by reporter Choe Chung-ung on the performance of the Patriot missile which notes that the Patriot intercepted and shot down 50 to 60 percent of the Scud missiles during the Gulf war and the "shortcomings" of the Patriot, namely, "its enormous price, namely \$120 million per unit; the extensive fallout of its fragments which can cause heavy human casualties and material loss; and the helpless situation in case the enemy fires the missile with a chemical warhead."

KYONGHYANG SINMUN on page 4 also carries a 200-word article by reporter Pak Hun-sin in the column "Reporter's Bench." The article notes the opposition Democratic Party's [DP] position concerning the U.S. plan to deploy Patriot missiles to the ROK, and refers to remarks by DPR Chairman Yi Ki-taek: "The deployment of Patriot

missiles to the ROK at this critical juncture when negotiations for nuclear inspection is underway can adversely affect the inter-Korean dialogue although it is said to be for defensive purposes."

The pro-government SEOUL SINMUN on page 4 carries a 1,000-word article by Washington-based correspondent Yi Kyong-hyong entitled "The Meaning of the U.S. Plan To Deploy Patriot Missiles—To Provide a Shield for the ROK Defenseless to Scud Gttack." The article says, "The U.S. plan to deploy Patriot missiles to the ROK seems to be prompted by the sheer defensive purposes in preparation for a North Korean Scud missile attack." The article stresses that the Patriot deployment is far from designed to pose a new threat to North Korea, and notes, "Nevertheless, the prevailing view about the plan to deploy -atriot missiles is that it will serve as important leverage to pressure North Korea into an early acceptance of nuclear inspection." The article goes on to note, "The deployment of the Patriot missiles in he ROK seems to be the U.S. measure to demonstrate its resolute will to defend the ROK."

SEOUL SINMUN on page 7 carries an 800-word report compiled from AP, YONHAP reports from Washington entitled "Patriot's Interception Capability 'Unsatisfactory.'" The report says, "The Patriot intercept missile, which the United States is planning to deploy to the ROK, is a little improved from the type used in the Gulf war but is reported to have only a limited capability against the North Korean missile attack. The PAC II-type Patriot, which is expected to be deployed in the ROK, was used by Saudi Arabia and Israel in 1991, and there is controversy over its capability to hit the target. Political analyst (Baker Spring) of the Heritage Foundation said that the United States is now developing the PAC III, and the missile to be deployed in the ROK will be the PAC II." The article concludes by quoting a#remark by a U.S. military strategist that the U.S. plan to deploy Patriot missiles to the ROK is made more from political considerations than from military considerations.

The conservative CHOSON ILBO carries on page 1 a 650-word article by Washington-based correspondent Chong Hae-yong citing the 27 January WASHINGTON TIMES' article which said that "To cope with the possibility of North Korea's missile attack, the Clinton Administration plans to deploy 256 Patriot missiles (64 launching pads) and special radar equipment capable of chasing and intercepting several targets at the same time to the ROK." The article also quotes the WASHINGTON TIMES as reporting that "the plan to deploy the Patriot missiles in the ROK is an important sign that the United States is concerned about the failure of negotiations over nuclear inspections of North Korea's facilities." The article also quotes the WASHINGTON POST report on the U.S. plan to deploy Patriot missiles in major ports and airports of the ROK and on U.S. plans to sell the Patriot missiles to the ROK. The article concludes by citing WASHINGTON POST as saying that "the U.S. Government is promoting the plan to station two Apache helicopter battalions in the ROK which will replace the existing Cobra helicopter battalion."

The CHOSON ILBO also carries an 800-word article by reporter Pak Tu-sik on page 5 about the ROK Government's

reaction to the deployment of the Patriot missiles in Korea, and notes that all along, the ROK and U.S. Governments have stressed "deployment of the Patriot missiles only in consideration of security and technology." The article says that "such an explanation by both the ROK and U.S. Governments is aimed at preventing the introduction of Patriot missiles from having a bad effect on negotiations on North Korea's nuclear issue." Then the article points out the possibility that "the deployment of the Patriot missiles may give North Korea, which has currently been driven to a corner, a pretext for frustrating negotiations with the International Atomic Energy Agency [IAEA]." The article notes the unfavorable reaction of our government's working-level officials involved in negotiations with North Korea. The article then notes prevailing opinion that "beginning with the deployment of the Patriot missiles, the United States-led regional missile defense system—TMD-Theater Missile Defense—should be more systematically reviewed," and also notes that "under the present circumstances with North Korea's missile threat, the introduction of weapons should be reviewed in terms of a middle and long-term plan, rather than a short-term plan."

CHOSON ILBO also carries on page 5 an 800-word article by Kyong Yong-won analyzing the efficiency of the deployment of Patriot missiles to the ROK, in which he notes the Patriot missiles' defects the low accuracy rate of 50-60 percent and the nine-percent destruction rate. Then the article says that "even if the Patriot missile's defects are remedied, it is doubtful whether the Patriot missiles will be efficient considering the many stumbling blocks, including high mountains, that exist on Korean terrain." Comparing Korean terrain with the Gulf war example, the article points out that although it took 20-30 minutes for a Scud missile launched in Iraq to reach a target, "the early-warning time is no less than three or five minutes" on the Korean peninsula because the battlefield depth is only 40 km. The article says that assuming that the Patriot missiles take three to five minutes to chase and intercept a target, "the Patriot missiles have almost no time to intercept a Scud missile once it is launched in North Korea."

The left-leaning HANGYORE SINMUN carries on page 4 a 1,400-word article by Washington-based correspondent Chong Yon-chu which cites NEW YORK TIMES and AP News Agency reports on U.S. plans to deploy the Patriot missile system to the ROK. Quoting U.S. officials as saying that "because the Patriot missiles are purely defensive, their deployment in the ROK will not aggravate tension on the Korean peninsula," the article says that "even though the Patriot missiles are defensive, their deployment is sure to strengthen the military power of the ROK Army and the U.S. Forces in Korea. It is difficult to predict what reaction North Korea will show and what effect the deployment of the Patriot missiles will have on negotiations over the nuclear issue." After noting that some U.S. State Department officials were concerned over the bad effect the Patriot missiles might have on nuclear negotiations with North Korea, the article says that "considering the situation of the Korean peninsula, the weapons for 'defense' may be turned into weapons of 'political offensive' which cause crises and tension." The article concludes: "Generally speaking, the

deployment of Patriot missiles will have a bad effect on the solution of North Korea's nuclear issue and on reconciliation trends on the Korean peninsula. In this connection, some analysts point out that North Korea should also be to blame for dallying too long in the political game of negotiations with the United States and the IAEA. If there had been more rapid progress in nuclear negotiations and a foundation for resolving the nuclear issue had been laid, the military hard liners within the U.S. Administration would not have had an excuse for a hard-line policy."

The HANGYORE SINMUN also carries on page 4 a 600-word article by Yi Sang-ki detailing the capabilities of the Patriot missiles which he says are commonly known as the "missile that catches missiles." After noting that hundreds of Patriot missiles have been deployed in the U.S. continent, Germany, Netherlands, Italy, Saudi Arabia, and Israel, the article says "the supreme speed of the Patriot Missiles is Mach 6 and their firing range is known to be over 150 km. Their effective range is 70 km and it takes the Patriot missiles three minutes to launch and intercept the enemy's target." The article notes that Patriot missiles were on display at the U.S. Suwon Base during the Ulchi Focus exercise in 1992 and during the Team Spirit exercise last year, and points out that: "There are some that say that the Patriot missiles are not suitable for Korean terrain because, for starters, the Patriot missiles are too expensive with the price of each launching pad amounting to \$150 million; second, considering that Korean terrain has short battlefield depth, the efficiency of Patriot missiles is doubted." The article says: "Unlike the depth of the battlefield in the Gulf War, Seoul is less than 40 km away from the Armistice Line, so the accuracy of the missile's air interception rate will not reach that of the Gulf War. In addition, contrary to U.S. press reports of the Patriot missile's 80-90 percent target-hitting rate, its target-hitting rate is in fact only about 50-60 percent." The article concludes by quoting general opinion within the army that "considering economic and accuracy conditions, the Patriot missiles will provide nothing more than mental stability when facing a southward attack."

The moderate CHUNGANG ILBO in Korean publishes on page 2 a 500-word article by Washington-based reporter Chin Chang-ho noting the U.S. plan to deploy Patriot missiles and a new-type Apache helicopter unit to South Korea and to send an aircraft carrier to the waters near the Korean peninsula, reporting that these moves suggest that the U.S. policy toward North Korea is moving in a hard-line direction. The article quotes THE WASHINGTON POST and THE WASHINGTON TIMES as reporting that the United States will replace the Cobra helicopters with new-type Apache helicopters and send an aircraft carrier to the waters near the Korean peninsula in an effort to strengthen the combat capabilities of the U.S. Forces in South Korea. The article also reports a Defense Department spokesman described the performance of the Patriot missiles at a briefing session.

CHUNGANG ILBO in Korean publishes on page 3 a 1,500-word article by reporter Kang Yong-chin on the meaning and background of the U.S. plan to strengthen U.S. Forces stationed in South Korea. Noting the background of

the recent hard-line attitude toward North Korea by the hawkish group led by the Department of Defense and CIA in connection with the negotiations with North Korea the article cites: "After all, the U.S. State Department, which has insisted on the need to continue nuclear negotiations with North Korea has become to realize that its concessions to North Korea have been fruitless."

Noting the position of the ROK Government, which has assumed a prudent attitude toward the hard-line group led by the U.S. Department of Defense and CIA, the article concludes that the United States will continue to maintain a hard-line attitude toward North Korea "through the strengthening of its defense capability in South Korea in a bid to apply pressure on North Korea."

CHUNGANG ILBO in Korean publishes on page 3 a 1,000-word article by reporter Pak Ui-chun describing in detail the background of the U.S. plan to deploy Patriot missiles to the ROK. The article reports that deployment of Patriot missiles, though it will contribute to strengthening the combat capabilities of the U.S. Forces stationed in South Korea, will have a serious effect on alleviating tensions on the Korean peninsula.

The article also quotes leaders of the opposition DP, including Chairman Yi Ki-taek, as expressing worries over the possible negative effect of the deployment of Patriot missiles on North-South dialogue and on easing tension on the Korean peninsula.

The article concludes that the U.S. plan to deploy Patriot missiles to the ROK should be prudently reviewed, not only because it would dampen the negotiations of the North Korean nuclear issue, but also because it would create an arms race on the Korean peninsula.

KCNA Denounces Deployment

SK2801105394 Pyongyang KCNA in English 1044 GMT
28 Jan 94

[Text] Pyongyang, January 28 (KCNA)—The United States and the South Korean puppets are reportedly having consultations to hasten the projected deployment of Patriot missiles in South Korea.

It is an unpardonable grave military challenge to scheme to introduce Patriot missiles in South Korea at a time when DPRK-U.S. contacts have taken place and the third round of DPRK-U.S. talks are expected for a fundamental solution to the nuclear issue on the Korean peninsula.

It is self-evident that the deployment of Patriot missiles in South Korea will key up the tensions on the Korean peninsula and increase the danger of war.

This scheme vividly shows the reckless attempt of the United States and the Kim Yong-sam traitorous clique to contain the DPRK militarily has gone beyond the danger line.

The hostile forces of the United States and the South Korean puppet clique claim that the deployment of Patriot missiles is to "counter the threat of missile attack from

North Korea." But this is no more than a crafty plea to justify their dangerous introduction of lethal weapons.

The real purpose of their massive shipment of Patriot missiles into South Korea under the pretext of "threat of missile attack" is to impede the progress of the DPRK-U.S. talks for a fundamental solution to the nuclear issue on the Korean peninsula and impose their unreasonable demand for "nuclear inspection" on the DPRK through pressure and threat.

The projected deployment of Patriot missiles in South Korea is motivated by the persistent anti-socialist, anti-DPRK campaign of the United States.

Not content with the deployment of more than 1,000 nuclear weapons in South Korea, the traitor Kim Yong-sam allowed the introduction of Patriot missiles to kill fellow countrymen. By doing so, he revealed once again his true color as a heinous traitor, flunkeyist and "civilian" fascist outdistancing the preceding military fascist dictators.

If the United States and its followers think they can subdue the DPRK with pressure and threat, it is a big mistake. That method may lead the situation to a hopeless phase, far from resolving the problem.

The United States must look straight at the reality and act with discretion and drop at once the reckless plan of Patriot missile deployment in South Korea.

ROK Defense Ministry's View

SK2901070894 Seoul HANGUK ILBO in Korean
29 Jan 94 p 3

[Article by Yi Won-chae: "Improvement of the Combat Capabilities of the U.S. Forces in the ROK—View of the ROK Defense Ministry"]

[Text] It has been reported recently that the United States plans to deploy Patriot missiles and Apache helicopter battalions in the ROK and plans to relocate aircraft carriers to this region. The ROK Defense Ministry thinks that this would contribute to beefing up the combat capabilities of the U.S. Forces in the ROK. At the same time, it assumes a prudent attitude toward this issue.

The Defense Ministry is trying to minimize the importance of the report and says: "This plan is being carried out on a normal basis as part of the U.S. plan to modernize its forces in the ROK."

It says that the deployment of Patriot missiles in the ROK was decided at the 23d ROK-U.S. Security Consultative Meeting in October of 1991. Patriot missiles won a good reputation by intercepting Iraqi Scuds during the January 1991 Gulf war. After the war, the United States persistently asked the ROK to buy them. However, it decided to deploy them in the U.S. Forces in the ROK when the ROK concluded that they are not suitable to our geographical conditions.

The Defense Ministry anticipates Patriot missiles would be used to intercept MiG's in times of war because they are

ground-to-air missiles and are capable of intercepting aircraft, even though the primary purpose of their deployment would be to intercept North Korean Nodong No. 1 missiles.

Military officials predict that they will be the latest generation of Patriot missiles whose capabilities to find targets and range have improved significantly and are capable of correctly intercepting and completely destroying enemy missiles' warheads in midair to minimize damage on the ground.

However, some military experts say the missiles may not prove efficient in the ROK because the battlefield depth is a mere 40 km, the warning time for a North Korean attack is short, the missile's hit rate is a mere 50 to 60 percent, and because it is not appropriate to use the missiles in a populous area. They also say that 36 Patriot launchers are not enough to contain enemy air strikes because North Korea is expected to fly aircraft over 2,000 times a day in wartime. They also say the deployment of Patriot missiles is important in mitigating people's uneasiness over Nodong No. 1 missiles.

Military officials concerned also say replacing the Cobra helicopter unit with two Apache helicopter divisions is part of the 1989 ROK-U.S. joint defense capability improvement plan.

Apache attack helicopters annihilated Iraqi tank units during the Gulf war. The helicopters are armed with devices to automatically identify and pursue targets, with night firing devices, and (Hydra) 70-mm rockets. The two-seater Apache flies at 270 km an hour and weighs 9,525 kg.

The Defense Ministry says the deployment of aircraft carriers on the Korean peninsula is related to the decision made at the 1993 ROK-U.S. Security Consultative Meeting to transfer the wartime operational command over the 7th U.S. Fleet to the commander of the ROK-U.S. Combined Forces Command: In an emergency, aircraft carriers would be rapidly deployed to the Korean peninsula as part of the rapid deterrence forces concept. It is expected that the 7th Fleet's ultramodern aircraft carrier Carl Vinson (91,400 tonnes) and conventional aircraft carrier Independence (86,000 tonnes) would be deployed.

The Defense Ministry considers these U.S. deployment plans to be a carrot-and-stick strategy for its nuclear negotiations with North Korea because these plans were mapped out long ago and because there is nothing worrisome about North Korea's current military situation.

More Press Reaction

SK2901094994

[Editorial Report] The following is a compilation of articles and editorials published in Seoul vernacular newspapers on 29 January on the possible deployment of Patriot missiles to the ROK.

The conservative CHOSON ILBO in Korean publishes on page 3 a 800-word editorial entitled "Patriot Is for Defensive Use." The editorial notes that "the Patriot missile is a defensive weapon," and that the use of such a weapon is "by no means to attack North Korea," but to prepare for a

possible attack by offensive weapons, such as the Nodong-1 and Nodong-2 missiles, which North Korea is currently developing. The editorial views that "if the South side does not take any defensive measures at a time when North Korea is developing offensive weapons, it would be relinquishing our security." The editorial reports China expressed opposition to the plan of deploying the Patriot missiles by noting: "This is an act threatening security and peace on the Korean peninsula." The editorial goes on to note that our opposition party [Democratic Party of South Korea] said that the plan to deploy the Patriot missiles may provoke North Korea. The editorial criticizes the opposition party's remark, noting that the opposition party does not know which side is committing acts that threaten peace on the Korean peninsula. The editorial concludes: "If North Korea changes its position and gives up the development of offensive weapons, then the plan to deploy Patriot missiles to the ROK will lose its justification."

The moderate HANGUK ILBO in Korean publishes on page 1 a 500-word article by Washington correspondent Chong Chin-sok on the plan to deploy Patriot missiles and Apache helicopters to the U.S. Forces stationed in the ROK and to send an aircraft carrier to the waters near the Korean peninsula. The article reports this is to "prepare for a possible threat by North Korea if the UN Security Council decides to apply economic sanctions against North Korea." The article quotes a Washington diplomatic source as stating that "this is part of a comprehensive operational plan to prepare for a possible state of emergency that may occur on the Korean peninsula." The article reports that a U.S. Defense Department spokesman confirmed that "the deployment of the Patriot missiles to the ROK is being promoted" and that "when a final decision is made, the U.S. Forces in the ROK will possess an improved model of the Patriot missile." The article notes it has been confirmed there are plans to deploy Apache helicopters to the ROK as part of the U.S. plan to modernize its weapons. The article concludes that the Patriot missiles will be deployed to Air Force bases in Pusan, Taegu, and Kunsan to serve as a strategic defensive base, rather than for the defense of the metropolitan area.

HANGUK ILBO in Korean on page 2 publishes a 1,000-word article by Washington correspondent Chong Chin-sok on the true nature of the new moves by the United States regarding the security situation of the Korean peninsula. The article notes that diplomatic circles in Washington are showing interest in U.S. moves regarding the Korean peninsula. The article explains that the United States is a "super power" militarily, but it needs the approval of the people to use its power, adding that "the situation on the Korean peninsula is no exception." The article notes "what the United States truly wants is not to be prepared for a war, but to strengthen deterrent power to prevent the outbreak of a war." The article notes that such moves by the United States are a means to put the finishing touches on the negotiations regarding North Korea's nuclear issue. The article notes that we cannot overlook the fact that the ROK may be used as a major weapons market by the U.S. defense industry. The article reports: "There are rumors that core figures of the U.S. defense industry in Washington secretly visited the

ROK and met with high-ranking officials to discuss the sale of the Patriots." The article notes that the recent moves of the U.S. military are an ultimatum to North Korea regarding the settlement of its nuclear issue and to confirm to Northeast Asian countries, including Japan and China, U.S. presence in this region. The article concludes: "Moves for the increase of U.S. capability in the ROK cannot by any means be limited to the Korean peninsula issue."

HANGUK ILBO in Korean publishes on page 3 a 800-word editorial entitled: "Unusual Atmosphere on the Korean Peninsula." The editorial notes "the ROK Government is remaining silent" about U.S. plans to deploy Patriot missiles and Apache helicopters and to send an aircraft carrier to the waters around the Korean peninsula in case of a possible military provocation on the South by North Korea. The editorial notes that the people are worried about this matter because "the United States and North Korea reached an agreement in principle regarding the nuclear issue late last year and that negotiations are under way between the International Atomic Energy Agency and North Korea on the method for inspection of North Korea's nuclear facilities." The editorial elaborates on the pros and cons of the United States increasing its capability. The editorial notes that the people are curious about "the concrete content of the proposal for the settlement of the nuclear issue as agreed upon between the United States and North Korea, its progress, the real reason for the United States to increase its capability in the ROK, and the nature of U.S.-ROK consultations at this time." The editorial urges the government to be clear about these matters and explain everything to the people. The editorial concludes: "How the situation develops and how rapidly changes are made on the Korean peninsula are directly related to our security, right to live, and interest."

The liberal TONG-A ILBO in Korean publishes on page 1 a 900-word article on the issue of "deployment of ultra-modern weapons for U.S. forces in the ROK." Noting this issue was revealed by the U.S. side first, the article emphasizes the ROK Government's "politico-military measures" regarding the issue. The article then reports the remark by a high-ranking security-related official on the report on the U.S. plan to deploy Patriot missiles and Apache helicopters to the ROK that "this plan has been included in the equipment modernization program of the U.S. Forces in the ROK for three to five years."

Asked if the weapons buildup was an indication of a "military provocation" by North Korea, the official stated: "There is no abnormal situation we should cope with at present," adding, "the necessity of such pressing measures for nuclear negotiations with North Korea should be reviewed from a political and military standpoint."

Referring to remarks of military officials, the article notes that "the question of deploying weapons at this time may cause a lot of controversy." The article quotes a statement by government authorities that "the recent U.S. report on projected Patriot missiles deployment, on dispatch of a state intelligence support team to the ROK, and on introduction

of Apache helicopters, has led to the impression of heightened 'tensions' on the Korean peninsula. Thus, the government expressed its hope to the United States that the U.S. military authorities will refrain from leaking intelligence."

The moderate KYONGHYANG SINMUN in Korean publishes on page 1 a 300-word article by Washington-based correspondent Kim Hak-sun. The article reports: "It was learned on 27 January that the U.S. Government is strongly hoping that the ROK Government will purchase Patriot missiles, which it is considering deploying on the Korean peninsula to counter Scud missile attacks by North Korea." The article noted that a diplomatic source in Washington observed that "the U.S. Government's plan to increase military power, including deployment of Apache helicopters in the ROK and dispatch of aircraft carriers to the coast of the Korean peninsula, is related to the weapons sale strategy of U.S. military industries toward the ROK."

The moderate CHUNGANG ILBO publishes on page 3 a 1,200-word editorial entitled "Is the Korean Peninsula Uneasy?" Noting that the report on the U.S. arms buildup plan on the Korean peninsula is arousing "a sense of vague uneasiness" instead of "a feeling of relief" regarding security, the editorial points out that the report on deployment of Patriot missiles and Apache helicopters and on the dispatch of aircraft carriers will "evoke a sense of military tension," and refers to the "general observation" that such measures are "means of diplomatic pressure" on North Korea to accept nuclear inspections. The editorial reports that while negotiations are under way, such measures may possibly "irritate North Korea" and cause a "negative influence" on the negotiations.

Stressing that "military issues should be advanced in secret," the editorial expresses misgivings that the disclosure of such plans might have "diplomatic and military purposes." Referring to an explanation by government authorities of the U.S. plan to deploy weapons, the editorial reports that the ROK Government has failed to "consult sufficiently" with the U.S. Government on reinforcement of U.S. forces in the ROK and that our government has been "dragged" into U.S. policy on "the military situation" on the Korean peninsula, rather than "positively coping with this situation."

The editorial calls on the government to give "a clear explanation on the true aspects" to the people and stresses that "concentration of ultramodern weapons on the Korean peninsula during an atmosphere of detente is not desirable."

KCNA Reiterates Denouncement

SK3001102394 Pyongyang KCNA in English 1010 GMT 30 Jan 94

[Text] Pyongyang, January 29 [date as received] (KCNA)—The United States and the South Korean authorities are reportedly having consultations to hasten the projected deployment of Patriot missiles in South Korea.

It is an unpardonable grave military challenge of keying up the tensions on the Korean peninsula to scheme to introduce Patriot missiles in South Korea at a time when DPRK-U.S.

contacts have taken place and the third round of DPRK-U.S. talks are expected for a fundamental solution to the nuclear issue on the Korean peninsula.

The hostile forces of the United States and the South Korean puppet clique claim that the deployment of Patriot missiles is to "counter the threat of missile attack from North Korea." But this is no more than a plea to justify their dangerous introduction of lethal weapons.

The real purpose of their massive shipment of Patriot missiles into South Korea under the pretext of "threat of missile attack" is to impede the progress of the DPRK-U.S. talks for a fundamental solution to the nuclear issue on the Korean peninsula and impose their unreasonable demand for "nuclear inspection" on the DPRK through pressure and threat.

If the United States and its followers think they can subdue the DPRK with pressure and threat, it is a big mistake. That method may lead the situation to a hopeless phase, far from resolving the problem.

Seoul 'In No Hurry' to Deploy Patriots

SK0102022994 Seoul YONHAP in English 0221 GMT 1 Feb 94

[Text] Seoul, Feb. 1 (YONHAP)—Seoul and Washington are reportedly out of step over the timing of deploying U.S. Patriot missiles in South Korea, with the Americans wanting to execute the plan as soon as possible while the Koreans are in no hurry.

The two governments, currently discussing deployment of Patriot missiles on the Korean peninsula, are considering some time in March or April, a senior Seoul official said Tuesday.

Korea is in no hurry to deploy the missiles as there are no clear signs of a threat to the Korean peninsula, while the United States wants deployment to take place as soon as possible, producing the difference of opinion, the official said.

Seoul, fearing that the missile deployment may provoke Pyongyang and sidetrack the process of resolving the North Korean nuclear problem, wants to watch the progress of the nuclear talks before making a decision, he said.

Controversy Over Alleged Russian Nuclear Assistance to DPRK

'Active' Russian Participation Claimed

PM2701172194 Moscow IZVESTIYA in Russian 27 Jan 94 First Edition pp 1, 4

[Sergey Agafonov report: "A Total of 160 Russian Nuclear Scientists and Missilemen Helped North Korea To Create a Nuclear Bomb. The Japanese Have Learned This from a Secret Report by the Russian General Staff"]

[Text] Tokyo—The Japanese weekly SHUKAN BUNSHUN carries a detailed account of a secret report on North Korean nuclear affairs prepared by the Russian General Staff and an interview with an unnamed official involved in

compiling that report, referred to in a note as "a leader." The report is entitled "The Russian Federation's Military Policy in the Asia and Pacific Region Under the New Military-Political Conditions."

It seems that more can be seen from the top of our General Staff building than from the U.S., Japanese, or NATO counterparts. At any rate, Russian specialists and analysts are more candid on the problem of the North Korean nuclear program and stricter in their judgments than their Western colleagues, who recently have repeatedly shared information with journalists—true, their own journalists, not foreigners. It follows from the report, prepared for Grachev and then forwarded to Yeltsin (according to the Japanese magazine, which was told all this by our talkative secret agents in Moscow), that Pyongyang has scored major achievements in implementing a missile program and a nuclear program. The DPRK already has its own nuclear warheads and several hundred delivery vehicles capable of delivering the payload.

It is clear from the Russian report, and from the mysterious "leader's" comments on it, that Pyongyang embarked with particular zeal on its nuclear missile program in the second half of the eighties, with active Russian participation. Almost 160 Russian nuclear scientists and missilemen have passed through North Korean laboratories and specialized centers since then. At present nine Russian nuclear scientists and 17 highly qualified missile specialists are working in North Korea. This is outside the framework of bilateral cooperation and is unofficial, as it were—according to the "leader's" comments, many of our scientists have changed their names, and some have taken DPRK citizenship. Only it is not this that is important but the fact that the project to create the Korean Nodong-1 intermediate-range missile was successfully completed with the assistance of Russian brains, and North Korea has accumulated a sufficient stock of enriched nuclear raw materials with the help of Russian scientists and technologies and now possesses approximately 10-12 kg of uranium-235 and 20 kg of plutonium-239. Citing the testimonies of four Russian specialists who recently returned from the DPRK after working in Korean nuclear complexes, the report maintains that Pyongyang already possesses one or two nuclear warheads and by the end of this year will roll several more off the conveyor belt. The DPRK is now engaged in creating a new generation of Nodong-2 solid-fuel missiles with an increased hit range. According to Russian estimates, in the very near future our fuel technologies and know-how and our missile scientists and solid-fuel specialists will be objects of special attention for Pyongyang's agents.

In this connection the report proposes revising all existing technological agreements between Russia and the DPRK, stopping the leak of cadres, and devoting special attention to bridge-building with the United States, South Korea, and Japan for extensive coordination of actions. It is even proposed that we think about the prospect of creating some kind of regional ABM system involving Russia, Japan, and the United States. At the same time it is pointed out that not only Russia but also China has been involved in the DPRK's nuclear affairs, and the Chinese factor is now becoming the key one.

The document cited at length by the Japanese magazine is stamped "top secret" and was prepared by the Russian Defense Ministry General Staff Military-Strategic Analysis Center. After being read by Grachev and Yeltsin, extracts from the report were forwarded on the president's instructions to the U.S. Defense Department (within the framework of an information exchange). A facsimile of a Russian Defense Ministry form with the issue number 001 SM-137 and date of publication 22 October 1993 is even given as an illustration. In short, there are no doubts about the authenticity of the document itself, but some questions do arise, and it makes sense to ask them. The first and most important question: On what unspecified grounds does Russian General Staff information get into Japanese hands, accompanied, moreover, by detailed comments and explanations by a "leader" working, to judge from the wording employed by the weekly, in the structure of the General Staff itself? Maybe no major secrets have been divulged, but the question needs to be answered if only for one reason—a Japanese audience is the first to learn about the Russian military department's assessments, while the Russian audience, as is already the custom, is considered "second class."

Second question: On what terms and in what circumstances did the Japanese weekly obtain exclusive material from the Russian Defense Ministry? If it was on instructions from chiefs conducting an intricate publicity operation, I would like to have an idea of that intention. If it was without the chiefs' knowledge, it would be even better to know the whereabouts of the secret key which opens Russian General Staff safes for Japanese guests.

Finally, a third question, again one of considerable importance: Who in Japan (or some other country) will be the next happy possessor of Russian secret documents? If the Russian mass media are not old enough to have the honor of being the first to learn the Russian military department's viewpoint, they must at least get their bearings in the information area and know in which foreign journal or newspaper it will be possible to familiarize themselves with the views of their own Defense Ministry.

Kolesnikov Says Reporting Based on 'Forgery'

PM2701184194 Moscow KRASNAYA ZVEZDA
in Russian 28 Jan 94 p 1

[Observer Aleksandr Golts report on interview with Colonel General Mikhail Kolesnikov, chief of the Armed Forces General Staff; place and date of interview not given: "General Staff Secret Report" in Fact Blatant Forgery. Chief of Russian Federation Armed Forces General Staff Refutes Articles in Japanese Weekly and IZVESTIYA"]

[Text] The popular Japanese weekly SHUKAN BUNSHUN has published material which, if it were true, would cause an international sensation; the respected Russian newspaper IZVESTIYA has given a detailed account of this material. Citing a secret document from the Russian General Staff and an interview with an anonymous staffer from this organization, it is reported that Russia is allegedly assisting the implementation of North Korea's nuclear missile plans. Also, that our nuclear and rocket scientists have helped to develop the nuclear weapons [boycepripsy] which, it seems,

the DPRK already possesses as well as the means to deliver these weapons. Moreover, it is claimed that, in the Russian military's assessment, the situation is so grave that the issue of establishing a joint system of ABM defense for Russia, Japan, and the United States needs to be addressed.

But it is probably no accident that neither the actual magazine nor IZVESTIYA has attempted to ascertain whether this document is genuine by making inquiries at its alleged source.

In reply to my question as to whether such a document really exists, Colonel General Mikhail Kolesnikov, chief of the Armed Forces General Staff, answered: "The articles in the Japanese magazine and IZVESTIYA are based on a gross and obvious forgery. It is only to be regretted that such a respected newspaper has fallen victim to forgers by publishing this material from its Japan correspondent Sergey Agafonov without any preliminary verification."

Indeed, it can only be conjectured why the photograph of the first page of the "document" was thought sufficient to remove all doubts as to the authenticity of the report. After all, it is unlikely that IZVESTIYA employs people specializing in the clerical work of the Ministry of Defense who would be able to distinguish a genuine document from a forgery. People who deal with office paperwork, however, are adamant that the Ministry of Defense never uses the kind of document serial numbers indicated in the article. But if this is the case, the ironic questions in the article addressed to the ministry and the General Staff are still left hanging in the air. After all, if no leaks took place, any hint that there is a little key which "opens General Staff safes for Japanese guests" is simply an insult.

However, other questions are now being raised. In particular, what was the point of publishing these unverified reports. Col. Gen. Mikhail Kolesnikov believes that "we are talking about a clear provocation with the aim of casting aspersions on the Ministry of Defense and the General Staff." Can it be that someone actually wants to rekindle the antiarmy campaign of the past few years?

At the same time the chief of General Staff is not ruling out the possibility that this episode has played into the hands of those who want to complicate relations between Russia and North Korea.

Yes, the nuclear problems of the Korean peninsula are currently very acute. Russia is not hiding its alarm at the fact that the DPRK has suspended its participation in the Treaty on the Nonproliferation of Nuclear Weapons. At the same time, a ranking Russian diplomat stated recently, we believe that sanctions against the DPRK—on which some countries are insisting—should be used only as a last resort. But there are those who would prefer to replace the complex process of negotiations with open pressure on Pyongyang. And is it not currently in their interests to make it seem as if Russia is to blame for the fact that the DPRK has allegedly acquired nuclear weapons?

KCNA Cites Russian Denial

SK0202111494 Pyongyang KCNA in English 1003 GMT
2 Feb 94

[Text] Moscow, January 31 (KCNA)—The Russian paper KRASNAYA ZVEZDA January 28 reported that the chief of general staff of the Russian Armed Forces refuted the report of the Japanese weekly SHUKAN BUNSHUN about Russia's assistance in the missile and nuclear program of North Korea.

The chief of general staff, according to the paper said the report of the Japanese weekly was based on a rude and open false document and it was a clear provocation motivated by the intention to throw a shadow on the Ministry of Defence and the general staff of Russia.

The paper said:

At the same time, the chief of general staff did not rule out that this would be beneficial only to those who seek to complicate the relations between Russia and North Korea.

That is right. The nuclear issue of the Korean peninsula is now presenting itself as a very crucial matter. As was stated recently by a high-ranking Russian diplomat, we consider the sanctions against the Democratic People's Republic of Korea on which some countries insist are the worst means. Worse still, there are people who are trying to turn the complicated process of talks into an open pressure on Pyongyang.

It is not good to them to accuse Russia now of having helped the DPRK possess nuclear weapons. Is it?

DPRK Envoy Denies Russian Involvement

LD0402143794 Moscow ITAR-TASS in English
1359 GMT 4 Feb 94

[By ITAR-TASS correspondent Aleksandr Krylovich]

[Text] Moscow February 4 TASS—The reports of some mass media that Russian scientists participated in creation of nuclear weapons in Pyongyang absolutely contradict the reality, Ambassador of North Korea in Moscow Son Sung-pil told ITAR-TASS on Friday.

North Korea never had a military nuclear programme. The research in atomic energy was of an exclusively peaceful character, he noted.

The ambassador said the former Soviet Union rendered assistance to North Korea in various spheres. In those years, Soviet specialists, including nuclear energy experts, worked in the republic. However, now there are no Russian atomic experts in North Korea.

According to Son Sung-pil, Japanese mass media are initiators of various fabrications on the topic. It is not by accident, because "Japan has all the necessary components for creating nuclear weapons," he said.

"It is quite possible that certain circles of that country are interested that the world community's attention is attracted

by the fuss about the alleged threat from North Korea, using it as a ground and excuse to create their own atomic bomb," the ambassador stressed.

DPRK Informs IAEA of 'Total Rejection' of Inspections

SK0302025094 Seoul KBS-1 Radio Network in Korean 0230 GMT 3 Feb 94

[Text] North Korea today officially informed the International Atomic Energy Agency [IAEA] of its total rejection [chonmyon kobu] of nuclear inspections.

Meanwhile, U.S. Defense Secretary-nominee Perry said that in the event that dialogue between North Korea and IAEA is suspended and IAEA declares that the continuity of North Korea's nuclear safeguard measures is broken [kkaejida], the United States will immediately refer the North Korean nuclear issue to the UN Security Council.

Russia Allegedly Stops Delivery of Submarines to DPRK

SK0302063094 Seoul CHUNGANG ILBO in Korean 3 Feb 94 p 6

[By Yi Sok-ku from Tokyo]

[Text] In a dispatch from Vladivostok on 3 February, Japan's TOKYO SHIMBUN reported that when submarines that were to be sold to North Korea became an issue in the international community, Russia decided to stop delivering them to North Korea.

The paper, which carried exclusive news of Russia's plan to sell submarines to North Korea, sent a reporter to the (Novik) port in Vladivostok—which is the prohibited area for foreigners—and held an interview with a relevant official there. He said that Russia had decided to stop delivering submarines to North Korea.

Having obtained contract documents regarding transactions for the submarines that were to be sold to North Korea, the paper carried commentary on the documents on 3 February along with submarine photos.

The paper reported that although a relevant Russian military officer had said that they were "exporting scrap materials, not submarines," it was more likely that Russia was selling them as weapons as it has been confirmed that a North Korean high-ranking naval officer was directly involved in negotiations for the submarines.

The paper reported: Although Golf II Class submarines, which were to be sold to North Korea this time, appear to be largely scrap material, their facilities, including operational functions, remain functional.

According to the data furnished to the paper, the Management Bureau of the Resources External Affairs of the Russian Defense Ministry and the Japanese Toyen trade corporation (head office in Tokyo) signed the contract on 16-19 November last year.

The price of the 12 Russian submarines are as follows: Two of the submarines are \$140,000 based on price of \$51 per ton and ten submarines, at \$92 per ton, amount to \$1.15

million. One of these submarines has already been delivered to Najing port in North Korea.

Japan Drafts Accord on Helping CIS Republics Scrap Nuclear Arms

LD2401121394 Moscow ITAR-TASS World Service in Russian 0312 GMT 24 Jan 94

[By ITAR-TASS correspondent Andrey Varlamov]

[Text] Tokyo, 24 Jan—The Japanese Government expects to conclude by March this year outline agreements with three republics of the former Soviet Union, excluding Russia, on assistance in scrapping the nuclear weapons they have inherited after the disintegration of the Soviet Union. The ITAR-TASS correspondent learned this today at the Japanese Foreign Ministry.

In the words of a member of the disarmament section at the Japanese Foreign Ministry, diplomats from Tokyo are conducting talks in Ukraine, Kazakhstan, and Belarus to decide what share each of the three republics is to receive of the \$100 million Japan allocated to the CIS in April 1993 to facilitate the scrapping of nuclear weapons and the utilization of radioactive waste.

The Japanese assistance is to be directed toward facilitating International Atomic Energy Agency (IAEA) inspections at military and civilian nuclear facilities in these countries, and toward ensuring the safe storage of fissile materials. Specific programs will also envisage sending to the spot Japanese specialists from nuclear power stations and nuclear waste depositories, as well as teaching Japanese experience to local staff.

Tokyo has decided to expedite the process of drafting outline agreements in view of the fact that Ukraine and Kazakhstan have recently adopted a constructive stand concerning accession to the Nuclear Arms Non-Proliferation Treaty, and that Kiev has guaranteed the withdrawal of this type of weapons from its territory.

Belarus Seeks U.S.-Brokered Uranium Sales Deal With Russia

PM1901131194 Moscow IZVESTIYA in Russian 19 Jan 94 First Edition p 4

[Mikhail Shimanskiy report on interview with Valeriy Tsepkalo, adviser to the chairman of the Belarusian Supreme Soviet on foreign economic issues—date not given: "After Ukraine, Belarus Claims Its Share of Uranium"]

[Text] Minsk—The Belarusian leadership is concerned about the agreement signed in Moscow by Clinton, Yeltsin, and Kravchuk. And during the U.S. President's visit to Minsk the extremely delicate question of Belarus's share of the materials from the elimination of warheads was raised. IZVESTIYA's correspondent asked Valeriy Tsepkalo, the chairman of the republic Supreme Soviet's adviser on foreign economic questions, to comment on this situation.

"The question of the share of the uranium in the tactical and strategic nuclear weapons being withdrawn from Belarusian territory has been discussed in talks between ourselves and Russia," Valeriy Tsepkalo explained.

"Moscow and Washington formerly prepared an agreement on the sale to the United States of the uranium released as a result of the elimination of the nuclear warheads on strategic offensive weapons. At that time the United States reassured Kazakhstan, Belarus, and Ukraine that the agreement would not be signed before the question of the distribution of revenue from the sale of the uranium was settled. Nevertheless, the United States and Russia did sign the agreement. But the United States has assured us that the agreement will not come into force until agreement is reached on the distribution of the revenue. The United States is buying 500 tonnes of uranium over 20 years at a cost of \$5.5 billion."

"The agreement between the United States, Russia, and Ukraine contains provisions which establish Ukraine's share of uranium sales, either in money or in kind—that is to say, through the delivery of industrial uranium for Ukrainian nuclear power stations. And most important of all, Ukraine has succeeded in resolving the problem of tactical nuclear weapons; in other words Russia has agreed to recognize Ukraine's right to the fissionable materials in the tactical weapons and count their number when determining the profit from the sale of uranium."

"For us this is very important. Russia has not recognized our right to that quantity of fissionable materials in the nuclear weapons withdrawn from Belarus through 27 April 1992. But after all, almost half of all the tactical nuclear weapons of the former USSR were situated on the republic's territory."

"Russia has claimed that the lion's share of the revenue from the sale of uranium will go toward covering the expense of destroying the weapons. However, this does not correspond to reality, since Russia has received considerable sums for these very purposes from the United States."

"We consider it possible to begin talks with Russia about our share of the profits with the mediation of the United States—that is to say, to prepare an agreement similar to the one signed in Moscow."

Ukraine To Take No Part in Uranium Reprocessing Project

LD1801173394 Moscow Ostankino Television First Channel Network in Russian 1500 GMT 18 Jan 94

[From the "Novosti" newscast]

[Text] Russia and the United States, which signed a contract last week on refabrication of uranium with high enrichment coefficient into that with low-enrichment coefficient, will implement this document without Ukraine taking part. INTERFAX has learned this from high-ranking officials of the Russian Atomic Energy Ministry.

Iran Allegedly Suspected Czech Company Employee of Espionage

AU0102121094 Prague MLADA FRONTA DNES in Czech 31 Jan 94 pp 1, 2

[Jaroslav Kmenta and Jiri Bigas report: "Iran Suspected Skodaexport Employee of Spying"]

[Text] The Iranian intelligence service suspected Ladislav Tyl, a Skodaexport representative detained in Iran last year under so far unexplained circumstances, of espionage. This

was reported by a diplomatic source that does not wish to be identified in order to avoid difficulties in office.

Skodaexport Director General Jan Ricica, however, rejects the espionage charge. "Espionage activity is completely unrealistic," he said. He emphasized that following the intervention of the Czech ambassador to Tehran, Tyl was released with the explanation that the suspicions had not been confirmed.

Tyl was arrested shortly after the departure of the Skoda Plzen delegation that had visited Tehran to establish business contacts and also discussed the possibility of supplying Iran with modernized T-72 tanks. While some sources place Tyl's arrest precisely in the context of Skoda Plzen Director General Lubomir Soudek's business negotiations, Ricica said that such a connection seem unlikely to him. Nevertheless, Tyl participated in all Soudek's meetings in Tehran.

The Skodaexport director general also said that he could not think of any reason for detaining Tyl. "Since there was no indication of any links with the Skodaexport business activities in the course of the incident, we are certain it must have been a misunderstanding or a case of mistaken identity," he declared.

The Skoda Plzen business mission to Iran created suspicion among some intelligence services that Skoda is trying to acquire a share not only in supplies of conventional arms, but also of technology for the Iranian nuclear program.

Tyl was detained by Iranian security on 7 December last year, and released five days later. He had worked in Iran for almost four years. Following the incident, however, he returned home. The arrest cut his planned stay in Iran by approximately 14 days.

In response to our question, the Iranian Foreign Ministry, through its Prague embassy, refused to comment on the circumstances of Tyl's arrest.

According to experts on this area, it cannot be ruled out that the Iranian security service was attempting to find out whether Tyl had any information about the Iranian nuclear program.

Ricica considers Tyl's arrest a thing of the past. He says he does not expect it to have an impact on future business cooperation.

Czech Premier Denies Reports of Nuclear Sales to Iran

TA0702114294 Jerusalem Qol Yisra'el in English 1100 GMT 7 Feb 94

[Excerpt] The prime minister of the Czech Republic, Vaclav Klaus, has denied that companies in his country are selling nuclear technology, along with other weapons, to Iran. Speaking to reporters during the second day of his official visit to Israel, he was today lecturing at the Hebrew University. More from reporter Dick Winter:

[Begin recording] **Winter:** Dr. Vaclav Klaus, in his first visit to Israel, met this morning with his former economic adviser: the governor of the Bank of Israel, Ya'akov Frenkel. Frenkel, in 1986 a senior official in the International

Monetary Fund, helped Dr. Klaus to plan the new Czech Republic's emerging free market economy.

But reporters' first question to the visiting prime minister was about the charges that the Czech firm Skoda, one of the Czech Republic's largest companies, is selling nuclear technology, along with other weapons, to Iran.

Klaus: Well, I must say those are just rumors and speculations usually created by the competition in the Western European countries, in the United States companies which want to catch the markets themselves and try in advance to send rumors to undermine the Czech position. Simply that's not true. [passage omitted] [end recording]

Kravchuk, Kohl Discuss Aid for Nuclear Arms Destruction

LD1002184494 Moscow ITAR-TASS World Service in Russian 1812 GMT 10 Feb 94

[Text] Kiev, 10 Feb (UKRINFORM-TASS)—A telephone conversation took place today between German Federal Chancellor Helmut Kohl and Ukrainian President Leonid Kravchuk.

During the conversation Leonid Kravchuk gave explanations on the question of the elimination of nuclear weapons and also touched on bilateral Ukrainian-German relations. He stressed that Ukraine is fulfilling its obligations connected with moving toward nonnuclear status. It was also stressed that the fulfilment of these obligations entails a vast financial expenditure that is an inordinate burden on the Ukrainian economy. In this connection a request was made to Germany to give financial and technical assistance for Ukraine to fulfil its obligations to eliminate nuclear weapons. There was also discussion of expanding economic relations between the two states.

For his part, the federal chancellor expressed understanding of the problems that Ukraine is tackling and stressed that Germany desires that Ukraine should maintain its sovereignty and move successfully along the path of reforms.

The leaders of the two states agreed on specific steps that will be made toward the further development of relations between Ukraine and Germany.

U.S. To Supply Russia 'Nearly \$30 Million' for CW Destruction

PM0102125394 Moscow IZVESTIYA in Russian 1 Feb 94 First Edition p 2

[Report by Aleksandr Shalnev: "United States Will Provide \$30 Million for Destruction of Russian Chemical Weapons"]

[Text] The United States will provide nearly \$30 million to set up a research center in Russia which would devise the most effective methods of monitoring the destruction of chemical weapons.

Accord on this subject was finally reached during U.S. President Clinton's recent visit to Moscow and was formalized by a protocol which is confidential at the moment. According to informed sources, the center will be based at Moscow's Vernadskiy Institute of Geochemistry and Analytical Chemistry. Over one-half of the sum promised by the Americans will go on instruments and equipment.

Kozyrev's Remarks on Rocket Deal With India

94WP0051 Bombay THE TIMES OF INDIA in English 17 Dec 93 p 13

[Text] Moscow, Dec. 16 (PTI)—The Russian foreign minister, Mr Andrei Kozyrev, has said that cryogenic engine technology has military applications and therefore Russia had to, for its own security, alter the contract with India.

Speaking on Russian television last night, Mr Kozyrev said that proliferation of missiles in Asia would only negatively affect Russian security.

"How can we allow India and not allow, for example, Pakistan," he queried during the interview.

Mr Kozyrev said that another reason for not allowing the transfer of technology was that India has had conflicts with some of its neighbours and transfer of this technology would only increase tension in the area.

Mr Kozyrev stressed that India fully understood Russia's stand on the issue and the alteration of the contract had not affected Indo-Russian relations.

"Relations are good. Mr Yeltsin visited India in January. Trade and economic relations are also growing," he added.

Mr Kozyrev brought up the cryogenic deal in the course of the interview as an illustration of the "myths" spread by the ultra-nationalists, alleging that the government was betraying Russian national interests.

"Let's assume that there is a proliferation of rockets in Asia. These will be closer to Russia than to the United States. Then in whose interest is it, to ensure that this does not happen?" he asked.

Mr Kozyrev's statement, however, raises more questions than it answers, according to observers here.

If Russia was aware that the technology had military applications, then why did it insist that the rockets and the technology could not be used for military purposes and why did it offer to prove that in front of an international panel of experts? asked a Russian specialist.

In this context, he then questioned the wisdom of Mr Yeltsin's statement in January in New Delhi that Russia would fulfill its commitments to India on the deal.

Indian and Russian experts had insisted in the past that the engines and technology had no military application and in any case India intended to use it only for its peaceful space research programme.

Russia-India Cryogenic Rocket Deal Reported 'Renegotiated'*94WP0055A Madras THE HINDU in English 6 Jan 94 p 1*

[Article by Vladimir Radyuhin: "Rocket Deal With Russia 'Renegotiated'"]

[Text] Moscow, Jan. 5. Russian space officials are optimistic that the cryogenic rocket deal with India will be carried through despite Moscow's refusal to supply related technology as envisaged by the original contract.

The head of the Russian space agency, Glavkosmos, Mr. Yuri Koptev, told a local news agency that India would receive two extra cryogenic boosters as compensation for technical aid that Russia was forced to cancel. Russia will also supply equipment for the testing and exploitation of cryo-engines.

The 1991 contract provided for the delivery of two cryogenic rocket boosters along with the knowhow for their manufacture in India. However, last year Moscow bowed to U.S. pressure not to transfer the cryogenic technology because it allegedly violated the Missile Technology Control Regime designed to prevent the spread of military rocket technology to developing nations.

Mr. Koptev said the delivery of extra boosters would keep the initial value of the contract "virtually intact" at about 228 million U.S. dollars. India has already paid Russia about 60 per cent of the cost.

Not yet finalised: The cryogenic contract was renegotiated during a visit to India last month by a Russian space delegation led by the head of the Glavkosmos, Mr. Alexander Dunayev. However, diplomatic sources in Moscow said the new terms of the contract were yet to be approved by both sides.

Meanwhile, a Russian daily has reported that an additional agreement has been reached by Moscow and Delhi for the supply to India of three more cryogenic boosters at a cost of \$3 millions each.

The *Rossiyskiye Vesti* daily, published by the Russian government, said the new contract would enable India to pursue its space exploration programme, although it would have to adjust it to the changed terms of the 1991 contract. According to the paper, additional boosters will be supplied in 1996, after the fulfilment of the main contract.

Israeli Minister Rejects Russian Nuclear Technology Deal*TA2001060494 Jerusalem Qol Yisra'el in English 0500 GMT 20 Jan 94*

[Text] Energy Minister Moshe Shahal has turned down an offer from Russia to sell nuclear technology to Israel. The minister has just returned from a visit to Russia, which included a tour of a nuclear power plant. The minister explained why he refused the offer:

[Begin Shahal recording] I am not in favor of entering or buying existing technology for nuclear power plants. I think that Israel and probably the world will have to wait many

years for a new technology, a safer technology. The Russians mentioned that in the past, during the time when Professor Yuval Ne'eman was the minister of energy and afterwards in a meeting with Prof. Amnon Rubinstein, there were talks by the Israeli Government to have a sort of a joint venture for a nuclear power plant. I mentioned and I explained our policy that we are more interested in the scientific question, in cooperation together maybe with Russia and the United States, but for future technologies, not the existing ones. Basically, I would say the government is not involved in buying energy supply as it was some years ago. I explained the new structure that we have here. [end recording]

Israeli Arms Shipment Arrives in Tallinn Port 23 January*WS2601101994 Tallinn ETA NEWS RELEASE in English 1829 GMT 25 Jan 94*

[Text] Tallinn, January 25—Arms shipment for Estonia's Defence Forces from Israel worth \$40 million was discharged at the Port of Tallinn on January 23, reliable sources told ETA.

Estonian government on January 7, 1993 concluded a \$60 million agreement with state-owned Israeli arms company TAAS under which the company must supply Estonia with arms by end of 1995 and Estonia must make payments by 2000.

The deal brought about a political uproar in Estonia resulting in ratification of the deal at Riigikogu's closed session on December 15 last year with 57 affirmative votes against 10 negative and two abstentions.

"The deal with Israel does not so much increase Estonian national defence than the will to defend Estonian state," Rein Helme, deputy head of the parliament's state defence commission, said.

Estonia bought from Israel automatic rifles Galil (5.56 mm caliber), machine guns Negev (5.56 mm), submachine guns Mini-Uzi, sniper's rifles, grenade launchers, mortars, anti-aircraft guns, missiles, ammunition, radio transmitters.

First shipment arrived in Estonia last summer.

U.S. Firm To Construct Ukrainian Nuclear Waste Storage Facilities*LD0102160694 Kiev Radio Ukraine World Service in English 0100 GMT 1 Feb 94*

[Text] Ukraine appears to have secured at least a five-decade respite from its insistent nuclear waste disposal headache caused by Russia's stubborn reluctance to admit Ukraine's nuclear fuel waste material to its reprocessing facilities now that the Zaporizhye nuclear power plant production association is reported to have signed a contract with the U.S. Duke Power company for construction of nuclear waste storage facilities. The contract materialized as a result of an international contest for nuclear waste disposal projects that the production association had to organize in view of the relevant governmental bodies' obvious indifference, inaction, and incompetence.

The contest reportedly drew participants and tenders from Germany, Britain, France, Canada, the United States, Spain, and [word indistinct]. The Zaporizhye nuclear power plant management chose the project drafted by the Duke engineering and service affiliates of the Duke Power company (?as specially) following the Ukrainian nuclear power industry's technological [word indistinct] and requirements. The project reportedly provides for storing used nuclear fuel cases in armored concrete cylinders. Despite their relative simplicity and cheapness, they are said to be both durable and reliable for storing fissionable materials, nuclear safety experts maintain. Currently, ecological and feasibility studies are under way in these sites. If everything goes well, the first storage facility is expected to be completed by late 1995. Similar storage facilities are being contemplated for construction at other Ukrainian nuclear power plants.

Germany Threatens To Break Nuclear Accord With Brazil

PY0902132894 Sao Paulo O ESTADO DE SAO PAULO in Portuguese 7 Feb 94 p A8

[Article by correspondent William Waack in Berlin]

[Text] Germany is prepared to renounce its nuclear agreement with Brazil, suspend any transfer of high technology (including that for submarines and space exploration), and withdraw its support for the Brazilian candidacy to a permanent seat in the future UN Security Council unless the Brazilian Senate ratifies those treaties whereby Brazilian nuclear activities are subjected to international inspections and controls. The governments of Brazil and Germany are concerned about the Senate's position, which could markedly undermine the visit Brazilian Foreign Minister Celso Amorim will make to Bonn late this month.

The main items on the agenda of Brazilian-German relations—including technological cooperation to be implemented by the private sector—now depends on the position of the Brazilian Government on the subject of nonproliferation of nuclear technology. In Bonn, the seat of the German Government, there exists the conviction that the overall credibility of the German foreign policy—especially in the eyes of its western counterparts—would be jeopardized if it does not discontinue every form of cooperation on advanced technology with Brazil should the Brazilian Senate fail to ratify two treaties: One containing amendments to the Tlatelolco Treaty (which bans nuclear weapons in Latin America and establishes controls) and a quadripartite agreement signed by Brazil, Argentina, the (Vienna-based) International Atomic Energy Agency, and by the recently created joint Brazilian-Argentine agency (which establishes comprehensive inspections and controls on nuclear activities by the two countries, which are described as "full scope safeguards." [given in English])

German laws require, irrespective of which party is in the government at the end of this year (general elections are scheduled for 16 October), that the Brazilian-German nuclear agreement signed in June 1976 be renounced. Through this agreement, Brazil gained access to various stages of the nuclear fuel cycle, in addition to obtaining technological transfer and to reaching a commitment to

build two large nuclear reactors (Angra-2 and Angra-3). The German Government cannot cooperate with a country which is not a signatory of the Non-proliferation Treaty (NPT)—which is the case of Brazil—or which has not agreed to another international control regime. Unless it is rescinded by either of the two parties, the agreement will be automatically renewed at the end of 1994 for another five years.

To maintain its credibility, the German Government is prepared to go as far as shouldering the financial consequences of reneging the contracts to build the Angra-2 plant, which is guaranteed by the Hermes insurance company (that is, German taxpayers may lose hundreds of millions of marks).

There is adequate parliamentary support for the government to take such a decisive course of action. An influential group of Social Democratic deputies has been campaigning since last year to get the nuclear agreement renounced on the grounds that Brazil has failed to join the NPT and that it refuses to submit its activities to international inspection. Most conservative deputies of the ruling German party (the Christian Democratic Union) firmly believe that "if the price to pay to secure a permanent seat for Germany on the UN Security Council is to support irresponsible countries like Brazil or Nigeria, it would be a very high price to pay," as a leading spokesman for the Christian Democratic bloc recently put it to a ranking Brazilian counterpart in Bonn.

The German reaction to the Brazilian Senate's behavior has been unanimously conveyed by several German circles, the private sector included. "Brazil will not receive a single screw from Germany if the Senate fails to ratify these treaties," is a widely repeated phrase. The campaign on the nuclear issue has already had an impact on other sectors: A visit to Germany scheduled for February by a Brazilian delegation has been canceled without clear explanations. This delegation was to have studied the impact of Brazil's proclaimed decision to join the Missile Technology Control Regime (its English acronym is MTCR) on Brazilian-German space exploration projects, which is being partially implemented by a subsidiary of Daimler-Benz. According to a high-placed source in Bonn, Siemens executives have also voiced concern about the fact that the Brazilian Senate is provoking a situation which in practice will preclude any advanced technology transfer to Brazil.

Brazil is on the "H list" (from which Argentina has just been excluded), which forces any German exporter or supplier of sensitive technology item to Brazil to obtain special authorizations before concluding any deal. It has been stated in Bonn that if the Senate fails to accept international controls on Brazilian nuclear programs, the above requirement would also be applied to projects such as the transfer of technology for building conventional submarines. Yet, if the Senate ratifies these agreements, the German Government would be willing to consider building a nuclear powered submarine—a major project of the Brazilian Navy—as "a borderline case" not explicitly banned by the Tlatelolco Treaty or by the quadripartite treaty. This project may thus be continued.

There has been wide speculation and conjectures in Bonn about the existence of "skeletons in the closets" of the military; that is, about whether international inspection teams may yet find undisclosed atomic projects in Brazil. The German Government speculates as to whether the reasons behind non-ratification is prompted by the Brazilian Senate's failure to understand that this is a far-reaching subject that it has many implications, or whether there are "other motives" for its reluctance to agree to the international inspections. In official and unofficial remarks, German officials have noted, however, that they have no indication to conclude that Brazil is running undisclosed parallel atomic programs.

The German Government is both perplexed and scared by Brazil. It has been openly contended here that a few powerful people are hurting the interests of the Brazilian nation in the name of "things of the past and of outdated positions," an argument that is often used to refer to the Brazilian Senate. Officially, the German Government is not supporting any country in the reorganization and (expansion) process of the UN Security Council. Informally, however, it is known that Bonn would support Brazil at the United Nations. Yet, this will fundamentally depend now on the nuclear issue.

German perplexity does not stem from the behavior of the legislature—which is marred by corruption scandals—alone but also from that of the executive branch. In Bonn, no one knows for sure whether the construction of Angra-2 will be completed. Wishing to conclude the project, the Germans have expressed desire to supply additional credit and even to finance Brazilian counterpart funds (nearly \$750 million), arguing that it would be cheaper to complete the 1,300 megawatt plant now than to cancel the entire project. It is not known, however, what President Itamar Franco will decide. In 1978, Franco presided in the Senate a congressional investigating committee on the Brazilian-German nuclear agreement.

Another problem that scares many people in Germany is the fact that Brazil is having difficulties in obtaining agreement with the IMF, a condition for reaching an agreement with the Paris Club, which encompasses all of Brazilian governmental creditors. Germany is the main trade partner of Brazil within the European Union and it is the second leading investor of risk capital in Brazil, second only to the United States. The German Government is thus concerned about the constitutional revision because it believes foreign investors in Brazil are treated differently from or worse than domestic investors.

It has been noted in Bonn that German Foreign Minister Klaus Kinkel touched on all these topics during his visit to Brasilia in October. The Brazilian foreign minister's visit, which seeks to strengthen German-Brazilian relations, which was described as strategic for both countries (during the Geisel administration) could be seriously undermined if the Senate does not change its position. It is feared that Amorim may come to Bonn only to hear complaints, without being able to give any kind of explanation.

Moscow Radio Commentary on Iran's Nuclear Programs

*NC1501093594 Moscow Radio Moscow in Persian
1600 GMT 14 Jan 94*

[(Sergey Viktorov) commentary]

[Text] Iran has once again stressed the peaceful nature of its nuclear program. [Word indistinct] Reza Amrollahi, official representative of the Iranian Atomic Energy Organization [IAEO], speaking to an IRNA correspondent on Wednesday, said that a recent report in the U.S. magazine "U.S. [word indistinct] TODAY" is sheer lies and (?part of a) U.S. plot against the world of Islam. (Sergey Viktorov) writes on this:

We should recall that normally information by the special services of the United States form the basis of reports such as those that are being (?recently heard) in a number of Western countries. Taking into consideration the special characteristics of U.S.-Iranian relations, it is difficult to consider such information to be realistic and unbiased.

Nevertheless, according to known facts, in their effort to portray the Islamic Republic as a country that has been (?rejected) by world society, the U.S. special services are willing to ignore conclusions that have been drawn by impartial international experts, something which Reza Amrollahi justly pointed out in his news conference.

Last fall a group of experts from the International Atomic Energy Agency [IAEA] inspected all the nuclear installations on Iranian territory and did not find any proof that Iran is manufacturing nuclear weapons. It should be noted that all similar IAEA inspections have so far yielded the same conclusion. Moreover, it should be added that Tehran has never expressed its intention to leave the Nuclear Nonproliferation Pact and has also signed the agreement on (?banning) chemical weapons.

Thus it appeared that the exploitation of this issue could be stopped. But this did not happen. The United States has succeeded in its efforts to convince its partners in the G-7 to join in boycotting the exports to Iran of so-called technology that can be used for dual purposes. Tehran, which was in a technologically unfavorable position, requested assistance from Russia and China to complete the construction of incomplete nuclear energy installations, and specifically (?agreed) on the purchase of two Russian-built nuclear reactors and one Chinese nuclear reactor. However, this rekindled a more intense campaign in the West regarding Iran's ambitious nuclear programs. Russia's assurances were in vain. Russia pointed out that Russian-Iranian cooperation in the field of nuclear energy would be strictly within the framework of the Nuclear Nonproliferation Pact and under the constant supervision of the IAEA.

Of course, the United States wants a more moderate government to come to power in Tehran. However, the traditional anti-U.S. remarks by the current Iranian leaders do not leave any chance for a positive change in the situation, and it seems that the West will thus continue to exploit the issue of Iran's imaginary nuclear threat.

One can agree with Reza Amrollahi's remarks in his recent interview. However, Tehran's wish to (?link) itself with the world of Islam, which can recently be seen, is also reflected in these remarks. If one can [word indistinct] speak about a type of U.S. plot, it is highly possible that this plot is only against Iran. But this plot must be regarded as a confrontation between two irreconcilable ideologies.

France's Nuclear Experience Seen Vital for Ukraine

*WS1301150194 Kiev KIEVSKIYE VEDOMOSTI
in Russian 12 Jan 94 p 6*

[Unattributed report: "French Nuclear Power Engineers Are Again in Kiev"]

[Text] A seminar attended by experts from the French Institute of Protection and Nuclear Security is being held in Kiev. Experience of this country, where 78 percent of the electricity is generated at atomic power stations, is of great practical importance for us. According to the Center for Nuclear and Radiation Safety at the Ukrainian State Atomic Supervision Administration [Goskonnadzor], this seminar designed for nuclear experts has initiated implementation of a three-year project providing technical assistance to Ukraine in this sphere. The project is financed by the European Community Commission as part of the TACIS [expansion unknown] program.

Expansion of Russia-ROK Military Ties Anticipated

*SK0302004394 Seoul YONHAP in English 0023 GMT
3 Feb 94*

[Text] Moscow, Feb. 2 [dateline as received] (YONHAP)—The Russian Government hopes to expand military cooperation with South Korea as it would contribute to peace and stability in the Asia and Pacific region, Vice Defense Minister Andrei Kokoshin says.

In an exclusive interview with YONHAP News Agency, Kokoshin said Wednesday that Russia positively evaluates its cooperation in the military field with South Korea.

The prospects for further expansion of such cooperation are bright, he said.

The development of military cooperation between the two countries will not have an adverse effect on any third country but rather contribute to the easing of tensions in the Asia-Pacific region, he noted.

Kokoshin, who is in charge of Russia's defense industry, said that conditions are ripe for South Korean companies to take part in the process of privatizing Russia's arms industry.

Russia needs South Korean capital for joint development of its arms industry as well as Korea's expertise in marketing.

He said the Russian Government is prepared to supply up-to-date military hardware to South Korea to help repay loans the former Soviet Union had taken out from Seoul. Moscow has already made a proposal and is now awaiting the Seoul government's reply, he added.

He also said there was no room for doubt about President Boris Yeltsin's promise that Russia would not provide North Korea with offensive weapons, a pledge Moscow would continue to honor.

With regard to the North Korean nuclear issue, Kokoshin said the Russian Government's basic policy is that Pyongyang should not have any nuclear weapons and therefore, Moscow will do its utmost to achieve that goal.

In any event, Russia believes that the level of North Korea's nuclear development isn't very high, he added.

ROK Reportedly May Accept Russian Uranium as Loan Repayment

*SK2501073894 Seoul YONHAP in English 0657 GMT
25 Jan 94*

[Text] Seoul, Jan. 25 (YONHAP)—South Korea is looking for various ways on getting repaid for loans to the former Soviet Union, including material repayment in enriched uranium and bunker C oil, an envoy said Tuesday.

"Possibility is not that high at this moment," said Kim Sok-kyu, South Korean Ambassador to Moscow, "but we are studying these ideas because of the precedent of being repaid in aluminum."

Kim temporarily returned to Seoul last week to brief the government on recent developments in Russia and to coordinate Seoul's policy toward Moscow.

The Paris Club will provide a rough guideline on repayment schedule for South Korea, Kim told a press conference, and an inter-ministerial discussion with Finance and Trade, Industry and Resources Ministries will find various alternatives.

Seoul promised 3 billion U.S. dollars in financial aid to the former communist country but delivered only 1.47 billion dollars and suspended the rest at the collapse of the Soviet Union.

Seoul has received a list of arms Russia offered for joint development and production, another alternative to loan repayment, but the government will need prudent review before making any decision, said Kim.

On North Korea-Russia relations, the envoy said Moscow proposed vice minister-level talks to North Korea from this year but is yet to receive a reply.

"North Korea and Russia are gradually restoring their relations of dialogue," he told reporters.

Moscow has not abandoned human rights issue with Pyongyang and is determined to insert the rights clause for the workers in a new agreement on operating North Korean lumber yard, he said.

President Boris Yeltsin said he wants his South Korean counterpart Kim Yong-sam to make certain to visit Russia this year, and the two countries will consult on this issue, he said.

Russian Ministry Denies Offering To Pay ROK Debt in Arms*LD2201174994 Moscow ITAR-TASS in English
1731 GMT 22 Jan 94*

[Text] Moscow January 22 TASS—The Russian Foreign Ministry has denied allegations that Russia has offered to pay its debts to South Korea by selling or launching joint production of modern arms.

In an exclusive interview with ITAR-TASS, Nikolay Solovyov, head of the Second Department for Asia of the Russian Foreign Ministry, on Saturday, said that "the Russian Foreign Ministry did not hand over to the Embassy of South Korea on January 19 any official documents concerning the selling or joint production of missiles, submarines or other modern technologies as a form of debt payment for credits."

The statement followed a publication by the South Korean newspaper HANGUK ILBO which quoted sources in the South Korean Foreign Ministry as saying that Russia had officially offered to pay its debts for Korean credits either by selling its arms or launching their joint production. The newspaper also claimed that on January 19 the South Korean Embassy in Moscow had been presented with a list of military technologies offered by Russia for selling or joint production. It said the list had to be considered by the Ministries of Finance, Foreign Affairs and Defence.

The newspaper said that during his visit to Seoul in August 1993 Aleksandr Shokhin, who was a Russian vice-prime minister at that time, handed over to South Korea a package of proposals on military and technical cooperation. Solovyov confirmed this information, but added that South Korea has not made an official reply yet.

ROK, Russia To Discuss Joint Weapons Development in February*SK2401071794 Seoul CHUNGANG ILBO in Korean
24 Jan 94 p 2*

[Text] It has been learned that the ROK and Russia will hold full-scale discussions in Seoul next month on the Russian Government's proposal for ROK-Russia economic cooperation on the joint development, production, and supply of ultramodern weapons. A government official said on 24 January: "Officials of Russia's Foreign Economic Relations and Finance Ministries will visit the ROK in late February to hold official negotiations with ROK Government officials over the joint development and supply of weapons and the issue of repayment of the loans provided by the ROK to the former Soviet Union."

Pakistani Paper Criticizes Indo-Japanese Nuclear Proposal*BK2201141094 Islamabad THE PAKISTAN OBSERVER
in English 22 Jan 94 p 6*

[Editorial: "A New Nuclear Joke"]

[Text] During bilateral talks between the two countries in Tokyo Monday, India and Japan agreed to work together to bring about a non-discriminatory Non-Proliferation Treaty [NPT]. It is not yet clear as to which country initiated the proposal but it is an even bet that it must have come from our nearest neighbours across the Wagah border. Pakistan's stand has always been for a regional NPT but what India is now proposing along with Japan is an NPT on a world basis. This is, the effect India's declaration that if all other countries dismantle their nuclear facilities, only then will India agree to do so. As far as India is concerned, the present treaty, which expires in 1995, has been extremely non-discriminatory in its own behalf. After the demise of the Soviet Union as a superpower, the USA remains the only superpower in the world which is in a position to dictate what the nuclear programme of any country should be. In this respect all its dictation has been directed at Pakistan which has been asked to cap its programme and then roll it back so that this country goes back to square one in the nuclear field, despite its repeated protestations that it intends to use nuclear power only for peaceful purposes. We have even agreed to sign the NPT if India does so at the same time. India's response, on the other hand, has been persistently negative. It is far ahead of Pakistan, having exploded a nuclear device as early as 1974 and the world knows this. This, apparently is not where India intends to stop if its latest proposal is examined closely.

Obviously, India sees no threat to its existence from the USA. It lives in mortal terror of its Chinese neighbours and trusts Pakistan not one whit and, it repeatedly warns its people that an attack from this country can never be ruled out. These are the two basic reasons for the present ploy. It stands out like a sore thumb that India is endeavouring for an NPT on a global basis in order to buy time to stockpile nuclear arms. The Indian proposal has been made with a lot of check since the attitude of the US towards its nuclear programme is nothing short of an endorsement of whatever India has achieved in that field, which is reported to be more than considerable. The Indian dread of the Chinese defies comprehension. The late Field Marshal Ayub Khan was once asked if he thought China might attack India. He pooh poohed the idea with the remark, "why should China do that and end up having to feed India's millions when it is hardly in a position to feed its own?" As for Pakistan, the idea is similarly ludicrous. The bania [derogatory term for petty traders] is a crafty creature by nature who thrives on intrigue. The latest Indo-Japanese proposal needs to be shot down in favour of one that calls for complete annihilation of nuclear arsenal the world over in one fell swoop. In that case there would be no need for an NPT at all. The world cannot afford to give India enough time to become a nuclear power.

Japan Urges India To Join NPT, Accept Inspections

OW1701120594 Tokyo KYODO in English 1104 GMT 17 Jan 94

[Text] Tokyo, Jan. 17 KYODO—Japan urged India to join the Nuclear Nonproliferation Treaty (NPT) to sweep away international concern about its development of nuclear weapons, Foreign Ministry officials said Monday [17 January].

Japan made the call during bilateral talks in Tokyo on nuclear nonproliferation, the second of their kind between the two nations, the officials said.

Japan is greatly concerned about India's nuclear development problem in view of its guidelines on implementing official development assistance (ODA), they said.

The guidelines require Japan to take into account, when extending ODA, the recipient nation's military expenditure and development, production, import and export of weapons, missiles and mass-destruction weapons.

Japan also called on India to accept inspections of certain nuclear facilities by the International Atomic Energy Agency (IAEA) to improve the transparency of its nuclear development plans, the officials said.

The Indian delegation, pointing out that India's basic policy is the total abolition of nuclear weapons worldwide, called

on nuclear power nations to make commitments to abolish nuclear weapons by presenting specific schedules, they said.

India also told Japan it basically supports the nuclear test ban treaty and a treaty to ban production of fissionable materials, they said.

India will be able to meet Japan's demand to improve transparency of its nuclear plans if the treaty to ban production of fissionable materials takes effect, the Indian delegation was quoted as saying.

Also in the talks, Japan pointed out the importance of holding multilateral talks to discuss security in Southwest Asia, including nonproliferation of nuclear weapons and missiles.

India told Japan that if such talks are held, it is necessary to invite all nations that could influence security in Southwest Asia and ensure that all nations shoulder equal obligations, the officials said.

Touching on India's relations with Pakistan, the Indian delegation explained that the ties are still tense despite talks between vice foreign ministers of both countries, they said.

Japan and India held their first bilateral meeting on nuclear nonproliferation last March in Delhi.

The Japanese and Indian delegations agreed to hold a third round of talks this year, the officials said.

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